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<160> 2050

<170> PatentIn Ver. 2.0

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aattcgaggg tgcaccgtca gtcttcctct tccccccaaa acccaaggac accctcatga   120
tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg   180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg   240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctgcaccaggact   300

42

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ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca accccatcg      360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc      420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct      480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga      540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg      600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc      660
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gactctagag gat                                                        733
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<210> 2
<211> 5
<212> PRT
<213> Homo sapiens

<220>
<221> Site
<222> (3)
<223> Xaa equals any of the twenty naturally ocurring łamino acids

<400> 2
Trp Ser Xaa Trp Ser
 1   5

<210> 3
<211> 86
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic sequence with 4 tandem copies of the GAS binding site
      found in the IRF1 promoter (Rothman et al, Immunity 1:457-468
      (1994)), 18 nucleotides complementary to the SV40 early promoter,
      and a Xho I restriction site.

<400> 3
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gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc      60
cccgaaatat ctgccatctc aattag                                           86
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<210> 4
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic sequence complementary to the SV40 promoter; includes a
      Hind III restriction site.

<400> 4
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gcggcaagct ttttgcaaag cctaggc                                          27
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<210> 5
<211> 271
<212> DNA
<213> Artificial Sequence

<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes GAS
      binding sites found in the IRF1 promoter (Rothman et al., Immunity
      1:457-468 (1994)).

<400> 5
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg   60
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc   120
gcccctaact ccgcccagtt ccgcccattc tcgccccat ggctgactaa tttttttat   180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt   240
ttttggaggc ctaggctttt gcaaaaagct t   271

<210> 6
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR1 promoter
      sequence (Sakamoto et al., Oncogene 6:867871 (1991)); includes a
      Xho I restriction site.

<400> 6
gcgctcgagg gatgacagcg atagaacccc gg   32

<210> 7
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer complementary to human genomic EGR1 promoter
      sequence (Sakamoto et al., Oncogene 6:867871 (1991)); includes a
      Hind III restriction site.

<400> 7
gcgaagcttc gcgactcccc ggatccgcct c   31

<210> 8
<211> 12
<212> DNA
<213> Homo sapiens

<400> 8
ggggactttc cc   12

<210> 9
<211> 73
<212> DNA
<213> Artificial Sequence

<220>
<221> Primer_Bind
<223> Synthetic primer with 4 tandem copies of the NFKB binding site

(GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the
SV40 early promoter sequence, and a XhoI restriction site.

<400> 9
gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg   60
ccatctcaat tag   73

<210> 10
<211> 256
<212> DNA
<213> Artificial Sequence

<220>
<221> Protein_Bind
<223> Synthetic promoter for use in biological assays; includes NFKB
      binding sites.

<400> 10
ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct   60
caattagtca gcaaccatag tcccgcccct aactccgccc atccgcccc taactccgcc   120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga   180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg   240
cttttgcaaa aagctt   256

<210> 11
<211> 2797
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (853)..(853)
<223> n equals a,t,g, or c

<400> 11
ggcacgagag agcagacaga attatatgta gaggacacag gagatattta cattgtggat   60
ggagatggag gattgaataa cagattgatc aaactgtccc agatttcat gatcctttgg   120
ctgcatggag aaaatgggac agggcctgct aagttcaaca tacctcacag tgttacactt   180
gattcagctg gtcgggtgtg ggttgctgac cgaggaaata aaagaatcca agtatttgat   240
aaagacactg gggagtggtt aggagcatgg aataattgtt tcacagaaga ggaccttctt   300
cagtcagttt actcctgatg ggaagtactt gattgtggcc cagctgaatc ttagcaggct   360
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ttccttcatt tggttcataa tgtttctttc ccgggaatat ttcaagtggc agttcagatt   600
ctcaattcac taagtgctta aaaatgatgt tcaagcacaa gaatttattt ttctagtata   660
aaagatctag tatcagaaag atttgttttt gtatcattaa gaatcttata ttttgttgcc   720
ctcttgggac ttagttttat ttgtaagtgc ataaggatat tttaatgaaa ggaaagtaac   780
taaaaaatgg ggttgggaag agggactaag gtggtaacct cattatttgc cctggtagac   840
tgattctccc tgngtaaaaa aaatgggaat aaaaatgagc ttgcatgata atttattaaa   900
tttcatgtga agaactccag acctccagat tgtgcaacta acataaagtg agctgcttga   960
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agtaggagtg ctgcatttga ctgagggaat catggatact tcgcaggaga agtgaatttg 1200
agctcagact tgaaaactga ggaggagctt accaagggac aaggaggaga aaacaataat 1260
ttccaagtaa agaaggtata aaaagttaga agtgtactgt aaactttgat aggctttttag 1320

45

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gccttttttta aagcccaact tggcttctgt ccattaccta taagatattt aatgtcagtc      1380
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acaaataact aaggattgta gagcttcctt ctctttttt ttctttttct ttcttttgtt      1500
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taatctttca aatcattctt cacccttcct cacatcagct tcctgctttt cccagtgttt      1800
tactgtaaat tgtgtagcat atgacaaatc ttgagctgac tttcctcttc acctgttatg      1860
gctggagtat tttccagacc tgaagggact cacacttgtt ttgatacttg gatcacatct      1920
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tgagaaatgt gttatgtttt ttactaaaaa gtataaatta aaattttgga aagaaaaggc      2700
aatattatct ggctccccaa ttaaagtttg attttattgt cacaaaaaaa aaaaaaaaaa      2760
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                               2797
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<210> 12
<211> 459
<212> DNA
<213> Homo sapiens

<400> 12
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gacaatgaca gctgatattt attggacatt tgcaccatgc caagcattcg gcttggatta      180
tcccatttgt ttctcacagc cggtatttat tgtctgctcc tctgtgccag gtgctgtgct      240
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gctgacccaa gcccaccca ttgccaacag ggccagggca aggtacaca caggggcctc       360
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atgttctatt ctcctacttt gaaaaaaaaa aaaaaaaaa                            459
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<210> 13
<211> 1939
<212> DNA
<213> Homo sapiens

<400> 13
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ctgcaggaag ctgaagtgag aggcccggag agggcccagc ccgcccgggg caggatgacc      120
aaggcccggc tgttccggct gtggctggtg ctggggtcgg tgttcatgat cctgctgatc      180
atcgtgtact gggacagcgc aggcgccgcg cacttctact tgacacgtc cttctctagg       240
ccgcacacgg ggccgccgct gcccacgccc gggccggaca gggacaggga gctcacggcc      300
gactccgatg tcgacgagtt tctggacaag tttctcagtg ctggcgtgaa gcagagtgac      360
cttcccagaa aggagacgga gcagccgcct gcgccgggga gcatggagga gacgtgagaa      420
gctacgactg gtccccgcgc gacgcccggc gcagcccaga ccagggccgg cagcaggcgg     ‚480
agcggaggag cgtgctgcgg ggcttctgcg ccaactccag cctggccttc cccaccaagg      540
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tcgtgctgag cggaagcctg ctgcaccgcg gtgcgcccta ccgcgacccg ctgcgcatcc      720
cgcgcgagca cgtgcacaac gccagcgcgc acctgacctt caacaagttc tggcgccgct      780
acgggaagct ctcccgccac ctcatgaagg tcaagctcaa gaagtacacc aagttcctct      840
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acgaggagtt ctaccgcaag ttcgccgtgc ccatgctgcg gctgtacgcc aaccacacca      960
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ggcaggtgta ccgcctctgc cacccgtgcc agatcgacta cgacttcgtg gggaagctgg     1140
agactctgga cgaggacgcc gcgcagctgc tgcagctact ccaggtggac cggcagctcc     1200
gcttcccccc gagctaccgg aacaggaccg ccagcagctg ggaggaggac tggttcgcca      260
agatcccccct ggcctggagg cagcagctgt ataaactcta cgaggccgac tttgttctct     1320
tcggctaccc caagcccgaa aacctcctcc gagactgaaa gctttcgcgt tgcttttttct     1380
cgcgtgcctg gaacctgacg cacgcgcact ccagtttttt tatgacctac gattttgcaa     1440
tctgggcttc.ttgttcactc cactgcc&ct atccattgag tactgtatcg atattgtttt     1500
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gggctagggc cactcaccgg aggagggcgg ggcctgcact tgaagtcagg ccgcacctgt     1740
ctgttttttgg aagggtagcc gacaaatcct tccagaggga aagttctttg tttaagtgtt     1800
gtacttgaaa aggtcaatct tcagggcttc ctgtttgaag tcaagtcaga ggtaaaccgg     1860
tcagttacag aagcaggatt tctaggattt ctaactccag ctgttcccat actgtctagt     1920
ttaaattatg gctgttaag                                                  1939

<210> 14
<211> 540
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (341)..(341)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (378)..(378)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (425)..(425)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (450)..(450)
<223> n equals a,t,g, or c

<400> 14
gaggatcccc acagggcccc tctgtagccc tggggagtcg gcagtgctgg tctaggcccc       60
ttaggagagg gggcagggggg gcagcagtag aaatgtggcg gggtccgact tggtgtttcc      120
ggccgtcttt gtgtctrtgt tgtgtatgtg gagtgtcatt cggtctttat gtccctcacg      180
gcttcagtct ctccatgtgt gtttctgccc caggctctgc ctgctgtcc cttgtgtatt      240
ccatctgtct agcccgtggt tccatgtcag amcggstttc ttctcgggam agcctggttg      300
catctggggc atctgttttg ttggtttgct tctgggtgca ngcagaccca ggagtgggtg      360
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47

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tcganttggc cccaaccaag ccccccccan ccctctcttt ctctctctca atcttccctt        480
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<210> 15
<211> 654
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (613)..(613)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (623)..(623)
<223> n equals a,t,g, or c


<400> 15
ggtcgaccca cgcgtccggt catggccatc cagagcctgc acccttgccc ctcagagctc         60
tgctgcaggg cctgcgtgas yttttaccac tgggcgatgg tggctgtgac gggcggcgtg        120
ggcgtggccg ctgccctgtg tctctgtagc ctcctgctgt ggccgacccg cctgcgacgc        180
tcccgaggcg gagaacaccg aacacccagt gaaggtgagg ggatcagcac ggcgccgcca        240
ccgtgctgga acgagactca gccacaagga ggtgcgaagc tctgacccag gccacagtgc        300
ggatgcacct tgaggatgtc acgctcagtg agagcacca gacacagaag ggtacgctgt         360
gatcccactt ctatgaaatg tccaggacag accaatccac agaatcaggg agaggattcg        420
tgggtgccgg gactggggag ggggacctgg gggtgactag gtgacataat ggggacaggg        480
ctgccttctg ggtgatgaga atgttctgga atcagatggg atggctgcac ggcgtggtga        504
aggtactgaa cgccacctca ctgtaagacg gtagattttg tattttacca caataaacaa        600
aacaaaacaa aanmaaaaaa aanaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa              654


<210> 16
<211> 1445
<212> DNA
<213> Homo sapiens


<400> 16
ggcacgaggg atttgaacaa gatcattaga attcaaaaaa caccagaaat gaaagatctt         60
tcctgaagct gtttaggaat attcatgata tacccttaac tgttctagag aacaaaatgc        120
gtctgtgctc cttcacaaaa gtccctatga atttgtttct caatgtgatc cttcttaagt        180
tctataactt tttgttttca ttaattttag gaaaatcctg ccttgcttcg ttgggcctat        240
gcaagaacaa taaatgtcta tcctaatttc agacccactc ctaaaaactc actcatggga        300
gctctgtgtg gatttgggcc cctcatcttc atttattata ttatcaaaac tgagagggta        360
agtattcaga ccagatgttt agtatttgag tgataggttc actttctagg gaccagctgc        420
agctccttct cttgaagatt gccaccagtg cccctcccac cttggggctg tcctctgcct        480
tcccttcctc tcttctttta tctttattcc tttccagcag gagttaaaac agaaagtttt        540
cagtcacctt tgtctatttt tgttagttca tttgtttttt aaaaagatga tgtttattgg        600
gttaagtatt agcagaatac ataaatcatt tagtacgttt cctgtttgcg tgaattctat        660
ttatgttggt cacattttgc aaattaatgt taaaacctat taatactcta cgggacagag        720
aagcacaagc tgcctgtgtg gggaatagct gccgtcagca gcctgggtat atgattggag        780
agaaagtcaa gctgatcttt ggcaccaaac cattccacat ctggtactaa accctgagct        840
gcagccccca ggcttgtgtt gccactggag cccactcgtc tagctttgtc tttaactggc        900
ccatctgcat tcccattaga gttcgtgtat tttgattatc tggtgaatga tctacttaac        960
agaaaggtag tccacatttt cccagaaagt gtttgcattt tgctttcaat atatggtttt       1020
atgggataat atatttctaa tgactaaaat gtgagtaaga tgtttttgaa taggacatt        1080
ttcttactgt gtctttagtt cctcggatta ctgtttcttc gcacactccc tgggctttag       1140
acagtgggat tgcaattagg tttggagtgt ttcattctgt ttgtcagttg tacggtgggt       1200
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48

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tgtgccaaaa tgcagttttt cttacctttt ttatttattt attttatct aatatagcca    1260
actggcagaa tatattgtct ttaatgtact tttttctgt ctttacagga taggaaagaa    1320
aaacttatcc aggaaggaaa attggatcga acatttcacc tctcatatta agtctggcaa    1380
tgatgactat atgtattcct gcctaaataa atcatctatt aatcattaaa aaaaaaaaa    1440
aaaaa                                                               1445


<210> 17
<211> 1722
<212> DNA
<213> Homo sapiens

<400> 17
ggcacgagcc agagcaggct gctaggcctg gggccaccac tgcccctggg tgctacaccc      60
agtgtgctgg gtcactggga acttcctgaa gtggtgtcac ctgaactggg cccccaagga     120
tggggtgcgg gcagtaccgc aggaagagga gcagccctg tgaagattga gagctgccag      180
aggctctgtg attggctgcg gcacgatgac ccgcgcacgg attggctgct cgggccgggg     240
gggccgggcc cggggggacag aatccgcccc cgaaccttca aagagggtac cccccggcag     300
gagctggcag accyaggagg tgcgacagac ccgcggggca aacggactggggccaagagc      360
cgggagcgcg ggcgcaaagg caccagggcc cgcccagggc gccgcgcagc acggccttgg      420
gggttctgcg ggccttcggg tgcgcgtctc gcctctagcc atggggtccg cagcgttgga      480
gatcctgggc ctggtgctgt gcctggtggg ctgggggggt ctgatcctgg cgtgcgggct      540
gcccatgtgg caggtgaccg ccttcctgga ccacaacatc gtgacggcgc agaccacctg      600
gaaggggctg tggatgtcgt gcgtggtgca gagcacsggg cacatgcagt gcaaagtgta      660
cgactcggtg ctggctctga gcaccgaggt gcaggcggcg cgggcgctca ccgtgagcgc      720
cgtgctgctg gcgttcgttg cgctcttcgt gaccctggcg ggcggcagt gcaccacctg      780
cgtggccccg ggcccggcca argcgcgtgt ggccctcacg ggaggcgtgc tctacctgtt      840
ttgcgggctg ctggcgctcg tgccactctg ctggttcgcc aacattgtcg tccgcgagtt      900
ttacgacccg tctgtgcccg tgtcgcagaa gtacgagctg ggcgcagcgc tgtacatcgg      960
ctgggcggcc accgcgctgc tcatggtagg cggctgcctc ttgtgctgcg gcgcctgggt     1020
ctgcaccggc cgtcccgacc tcagcttccc cgtgaagtac tcagcgccgc ggcggcccac     1080
ggccaccggc gactacgaca agaagaacta cgtctgaggg cgctgggcac ggccgggccc     1140
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ccctgccctt aacagacgga atgaagtttc cttttctgtg cgcggcgctg tttccatagg     1380
cagagcgggt gtcagactga ggatttcgct tcccctccaa gacgctgggg gtcttggctg     1440
ctgccttact tcccagaggc tcctgctgac ttcggagggg cggatgcaga gcccagggcc     1500
cccaccggaa gatgtgtaca gctggtcttt actccatcgg cagggcccga gcccagggac     1560
cagtgacttg gcctggacct cccggtctca ctcagcatc tccccaggca aggcttgtgg     1620
gcaccggagc ttgagagagg gcgggagtgg gaaggctaag aatctgctta gtaaatggtt     1680
tgaactctca aaaaaaaaa aaaaaaaaa aaaaaaaaa aa                          1722


<210> 18
<211> 1453
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (946)..(946)
<223> n equals a,t,g, or c

<400> 18
ggtcatcttt ctcttgctcg tacagagagg agacacccgt agaaatggag atttctacta      60
cagatgaaaa tttcttttat aaaagggtaa cttctctgta ttatcctgtg tttgctatt      120
ctgaaaataa taagctgaaa atattcctct tggcataag gattatttgg tgtggcatgt      180
tctgaacctc cactgttggc atcctttctt gattagcaga aacctaggaa cattgttgta      240
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49

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ataatgacta aattattgtc actgtcacat ttgttagtaa cttttttaa tataattgcc     300
attaaatgta aaaagcagca tctaagacat tcaaaatgta atttkgatac tacttttaaa    360
aataagatgc taaattaata gataaggtgg gtttcctcag tatattttca ttctaaacca    420
tccactaaag tagggctaaa gaggaattta gagtaggaag acttaggttt tgtattctgc     480
ctttgttcag tatcagtgtg actttggcca agttacctga cttctgaact gcattttgct    540
tttctctaaa taagtggggg taatacctat attagaggat tatgataaaa agatgtgaac    600
atattataaa attattttat aaactagaag acatttcaaa gaagttaagc tgccactgtt    660
agtttcacag acttgggtgt attagatgaa cagcttttca gttattgctt ctatagttgt    720
cctcttgccc tttcctggat tatcagtttc tgcctgtcta cctagtcatt cccatcatgg    780
taaaacattt ataytgttat ttcttccaag ttcagaaaaa accctctyty gaytcccccc    840
atcccattcc agcactttgg gaggccaagg cgggcagatc atgaggtcag gagatcgagm    900
ccatyctggc taacatggtg accCccatct ctactaaaaa tacaaacaa attagccggg     960
cttggtggtg ggcgcctgta tcccagcta ccggggaggc tgaggcagga gaaaggcatg    1020
aacccaggag gcagagcttg cagtgagcca agattgcgcc attgcactcc agcctgggcg   1080
acagagtgag actccatctc aaaaaaamga awaaaaaaa caacttattt taaattattt    1140
tcctagaaat tatgatgtca gcagaggtag ctaggtggta ttatggttga ctttgttat    1200
ttttaagaca gcttccgtat ttcttaggag ttttgctgaa gaacatggta tggggagaac    1260
atataatatt ctcatacact tcttaggatg ggatagatcc ctgtaacaga atattggtta   1320
acaagagaaa aacaagtttt aagacatgta tacctcatat atacatggga gatactcggg   1380
ggaagtgagt aaatctctca gaggtggctt aaataccatc atgtcctgaa aaaaaaaaa    1440
aaagggcggc cgc                                                      1453
```

<210> 19
<211> 1752
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (356)..(356)
<223> n equals a,t,g, or c

<400> 19
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gtcggcggcg gcggcggcgg ttgaactgac tcggagcgag gagacccgag cgagcagacg      60
cggccctggc gcccgccctg cgcactcacc atggcgatgc atttcatctt ctcagataca      120
gcggtgcttc tgtttgattt ctggagtgtc cacagtcctg ctggcatggc cctttcggtg     180
ttggtgctcc tgcttctggc tgtactgtat gaaggcatca aggttggcaa agcaagctgc     240
tcaaccaggt actggtgaac ctgccaacct ccatcagcca gcagaccatc gcagagacag     300
acggggactc tgcaggctca gattcattcc ctgttggcag aacccaccac aggtgntatt     360
tgtgtcactt tggccagtct ctaatccatg tcatccaggt ggtcacggc tacttcatca     420
tgctggccgt aatgtcctac aacacctgga ttttccttgg tgtggtcttg ggctctgctg     480
tgggctacta cctagcttac ccacttctca gcacagctta gctggtgagg aacgtgcagg     540
cactgaggct ggagggacat ggagccccct cttccagaca ctatacttcc aactgccctt     600
tcttctgatg gctattcctc caccttattc ccagccctg gaaactttga gctgaagcca      660
gcacttgctc cctggagttc ggaagccatt gcagcaacct tccttctcag ccagcctaca     720
tagggcccag gcatggtctt gtgtcttaag acagctgctg tgaccaaagg gagaatggag     780
ataacagggg tggcagggtt actgagccca tgacaatgct tctctgtgac tcaaaccagg     840
aatttccaaa gatttcaagc caggagaag ggttcttggt gatgcaggge atggaacctg      900
gacaccctca gctctcctgc tttgtgcctt atctacagga gcatcgccca ttggacttcc     960
tgacctcttc tgtctttgag ggacagagac caagctagat ccttttctc acctttctgc    1020
ctttggaaca catgaagatc atctcgtcta tggatcatgt tgacaaacta agttttttt     1080
attttttccca ttgaactcct agttggcaat tttgcacatt catacaaaaa aattttaat    1140
gaaatgattt cattgattca tgatggatgg cagaaactgc tgagacctat ttcccttct     1200
tggggagaga ataagtgaca gctgattaaa ggcagagaca caggactgct ttcaggctcc    1260
tggtttattc tctgatagac tgagctcctt ccaccagaag gcactgcctg caggaagaag    1320
awgatctgat ggccgtgggt gtctgggaag ctcttcgtgg cctcaatgcc ctcctttatc    1380
ctcatctttc ttctatgcag aacaaaaagc tgcatctaat aatgttcaat acttaatatt    1404
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                                        50
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ctctatttat tacttactgc ttactcgtaa tgatctagtg gggaaacatg attcattcac    1500
ttaaaatact gattaagcca tggcaggtac tgactgaaga tgcaatccaa ccaaagccat    1560
tacatttttt gagttagatg ggactstctg gatagttgaa cctcttcact ttataaaaaa    1620
ggaaagagag aaaatcactg ctgtatacta aatacctcac agattagatg aaaagatggt    1680
tgtaagcttt gggaattaaa aacaaacaaa tacattttag taaatatata tttttaaata    1740
aaaaaaagaa aa                                                        1752

<210> 20
<211> 2321
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (787)..(787)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (880)..(880)
<223> n equals a,t,g, or c

<400> 20
gtgaaagtgg gccttggaaa aakttctgaa ttaaagaaaa gctgcatgtg cacggaatgc      60
agtgtgatac attctctaaa gcaacatgtt gtaaaatttt actgctttct tgttgtgttt     120
tatatcttgt tttctccagg cttcgtggac tcgaccagag aagcaagagg tatagcttac     180
ctgaccacta gccagtcttt agttttgaaa gcattacagt ttaactcacc attgcagttt     240
aataaccaga catgctaaac taattagtaa tttagctaaa gaataggtcg ataggtag      300
acattactta gcaatagtat catttaggat gagcaagcaa gctgtgttgg gagtggatga     360
acaaatccat attatttcct aaaactggat cttattctct tgctggtgct ggtaaaatca     420
catccaggta attacaccaa tagaaataaa ttgcccccaa ttcccaggcc aggcattttg     480
aaatggtgaa agttttttga ctcacatggt tgatgtggct ctggaccata aagtcacaga     540
gttagtgatc taaaaaccca ctcctccctt tcctttccag ctcaactcat cttgttgctc     600
acttatttta taatgatcag tcttggtaaa ttatcacatc acgtttcatc tcaaaagcaa     660
tgcaaatgac atctctcgtt ggttttccca aattgctaaa cgtatctctg ttacttttat     720
agagcatyaa atttatgaga ttagaatgat gtggtacaaa tggttttatg tttttttaaag     780
tcagtancat ttaacctttg aaatttctct gactcattgc ttcagtttgg ataatgtggg     840
acttartttg aaaactgaar ttaagtatta atctttaggn tttgattgcc acatctcaag     900
amcctactta tgatcatgam tataattttt tacccgattt atatgaagta acatatagtg     960
aaaatgaaac cagtggactt cagatgagat tcaaggatct aatctctaag gactttttta    1020
aagttgcctt tgcctttat ccagatgggg ctttgatcgt gtaatgctat aaatgcagaa    1080
catcatgatc ctatagattc tgtatttaa tttggtaaat ctatcctta gtctttcmga    1140
aatgataayt attcagaacg tataactcaa gtgttcaggt caaggytata catatttata    1200
tgctgtttaa tatttaaaag ttgactgcct gtccccaggc actgatctta gtttctgcmc    1260
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atctcattct gcttgccttc atacaacttt ccttgtcat ctcatttaga gctggttgag    1560
gaggagctga gatttatcag ggagcattaa ggagatgtta agagaattat tattgtaagt    1620
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tcagaagttc cattctctcc tgtttgtctc atttggagat gaagaccata agtccagatg    1800
agtgcaaaag aaggctcagg ttatggccaa tttcatttg taagttctaa aagcattagc    1860
acttttacct ggaaggaggg agacaaaaac attttgatga gaagaataat tatcattaac    1920
cttcatattt ttggggaaaa aaggagtttt cttgccatca atatctttc atacttgccc    1980
agagctcatc tcctccttct gctgcagcct gggtggtcag catgactttt tgtctggatg    2040
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51

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gctggtaggt ggcacaccct gaagttgtgc aggagccata gtaaaagcat ttcaggggaa    2100
gatagtctaa tgacactgga gtctatctgt gtatcctcaa agggagaact gggcatctgg    2160
cagataattc catcatcaaa tctgtagtga gcctactgca aaataagaat tctctttaga    2220
aggctggtct gtggacatca ttaaacagga gaaatttcca catggagaaa tttcctgaaa    2280
gaaactagat aggaattaaa aaaaaaaaaa aaaaactcgt a                        2321


<210> 21
<211> 843
<212> DNA
<213> Homo sapiens

<400> 21
acgagcccac ccgtttctgc agatgcccgc atcatggtcc tgaggggatg ggggctggcc      60
tggagccttt cccccgtggt gtgtggctat agcggggaca tgaagggggt gtgttgggga     120
cgtagtgacc actcccttct accgtcagag atcctgcttc cccctgcccc ctgcccctcc     180
tcggctgtcc ttcataaccc cccacccact ccccacctgc catctcctgt gcttgtgcgg     240
atccaggaag cacctacctg ggcacagaga tcatcgctcg gtgcctcgcc cctacacaag     300
ggcgattaac ttctctgtta tgaactccta cttagtaatt ctgacatgaa actcccacta     360
ggataaaact tggcgcagaa cagcaattac tgaaaacaca tttttaaaaa ggttgatgtt     420
ttgtaagagt tcatcctcct ccactcctca gcctcctcaa ggagacacat atttagatct     480
tctctgtgtg agtctaactt ggagactgtg agttgcagtt taaaaggggc tctggggcca     540
ggtgcggtgg cacacacttg tggtctcagc tactcaagag gctgagatgt gaggaacgct     600
tgagcccagg agttcaagac cagcctgagc aacatgggta gatgggatct acccaaaaca     660
tttaacaata aggctggcat ggtggcatat gcctgtggtc ccagctactt ggaggctgag     720
gcaggagaat catttaagcc tgggagatcg aggctgcagt gaggtatggt ttcaactgct     780
gtgctccagc ctgggagaca gggcaatact gtgtctctaa aaaataaaaa aaaaaaaaa     840
aaa                                                                  843


<210> 22
<211> 1382
<212> DNA
<213> Homo sapiens

<400> 22
acgagtgcgg gcagcagcag ccccggcacg mgggagagag acaaagcatg gaggacacaa      60
caatgggagg aaaggcggac tctcaggaac ttcattcttc acgtggttta tggtgattgc     120
attgctgggc gtctggacat ctgtacctgt cgtttggttt gatcttgttg ttgatgagca     180
gattactagc caaagcaaag gacttccgtt ataacttatc agaggtgctt caaggaaaac     240
taggaatcta tgatgctgat ggtgatggag attttgatgt ggatgatgcc aaagttttat     300
taggcctgac caaagatggc agtaatgaaa atattgattc tcttgaggaa gtccttaata     360
ttttagcaga ggaaagttca gattggtttt atggtttcct ctcatttctc tatgatataa     420
tgactccttt tgaaatgcta gaagaagaag aagaagaaag cgaaaccgca gatggtttg     480
atggtacgtc acagaatgaa ggggttcagg gaaagacttg tgtcatattg gatttacata     540
accagtaacc ttgattcagg gactgaagtc attggctaat gaacacctga agcagcctcc     600
ttttctttt ctttccttgg cttatgcagg cttaatgtg cagtggggtg gttgtgatct     660
taccgtgcaa gtcaaccatg tgatcttgcc cagtacagct actagcctag tcccttgctc     720
gctcagctcc cccaacttct attgaagaaa atggtactcc tcattcttgt agtcagctac     780
aaagtacact gaaaatgatg ttcttggtgg tataattggt ttctgtatcg ttttgtttca     840
actcatgtat tcactgaact aaatttggac acttaacagc aaattgtgttgtggttaacc     900
cttgatgctt gtctttctaa cacactatta attatgatga ttctaatgga tttcattata     960
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cagataggtt catacaaaat taaaagtaaa attctgtgtt aatggtgctt ttaaaataat    1140
ttaaaaataa ctccatgttt ttgccttaga gtaagttaac ttactgtttt cagatagtag    1200
catgacatat ttctgtctgt gaaagcaaaa tttattttaa attttatttc caaatataca    1260
tccagagaaa gtaatttgta ttttttttaa agtaggcata ttacaaaga gggaacatgt    1320
gaatatgtat cttaatgttg tacataggga aattattcat cctaaaaaaa aaaaaaaaa    1380
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<210> 23
<211> 1734
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1714)..(1714)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1719)..(1719)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1723)..(1723)
<223> n equals a,t,g, or c

<400> 23
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gcgggagttc ctccttgctc tcgcccctac tcttctggt gttagatcga gcwaccctct    60
aaaagcagtt tagagtggta aaaaaaaaa aaaacacacc aaacgctcgc agccacaaaa   120
gggatgaaat ttcttctgga catcctcctg cttctcccgt tactgatcgt ctgctcccta   180
gagtccttcg tgaagctttt tattcctaag aggagaaaat cagtcaccgg cgaaatcgtg   240
ctgattacag gagctgggca tggaattggg agactgactg cctatgaatt tgctaaactt   300
aaaagcaagc tggttctctg ggatataaat aagcatggac tggaggaaac agctgccaaa   360
tgcaagggac tgggtgccaa ggttcatacc tttgtggtag actgtcagcaa ccgagaagat   420
atttacagct ctgcaaagaa ggtgaaggca gaaattggag atgttagtat tttagtaaat   480
aatgctggtg tagtctatac atcagatttg tttgctacac aagatcctca gattgaaaag   540
acttttgaag ttaatgtact tgcacatttc tggactacaa aggcatttct tcctgcaatg   600
acgaagaata accatgtcca tattgtcact gtggcttcgg cagctggaca tgtctcgtgc   660
cccttcttac tggcttactg ttcaagcaag tttgctgctg ttggatttca taaaactttg   720
acagatgaac tggctgcctt acaaataact ggagtcaaaa caacatgtct gtgtcctaat   780
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ccatcttcta tagcttttttt aacaacattg gaaaggatcc ttcctgagcg tttcctggca   960
gttttaaaac gaaaaatcag tgttaagttt gatgcagtta ttggatataa aatgaaagcg  1020
caataagcac ctagttttct gaaaactgat ttaccaggtt taggttgatg tatctaata   1080
gtgccagaat tttaatgttt gaacttctgt tttttctaat tatccccatt tcttcaatat  1140
cattttttgag gctttggcag tcttcattta ctaccacttg ttctttagcc aaaagctgat  1200
tacatatgat ataaacagag aaataccttt agaggtgact ttaaggaaaa tgaagaaaaa  1260
gaaccaaaat gactttatta aaataatttc caagattatt tgtggctcac ctgaaggctt  1320
tgcaaaattt gtaccataac cgtttatttta acatatattt ttatttttga ttgcacttaa  1380
atttttgtata atttgtgttt ctttttctgt tctacataaa atcagaaact tcaagctctc  1440
taaataaaat gaaggactat atctagtggt atttcacaat gaatatatg aactctcaat  1500
gggtaggttt catcctaccc attgccactc tgtttcctga gagatacctc acattccaat  1560
gccaaacatt tctgcacagg gaagctagag gtggatacac gtgttgcaag tataaaagca  1620
tcactgggat ttaaggagaa ttgagagaat gtacccacaa atggcagcaa taataaatgg  1680
atcacactta aaaaaaaaaa aagggggggc cgcnctggng ggnccaagct ttcg        1734
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<210> 24
<211> 1357
<212> DNA
<213> Homo sapiens

<400> 24

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ggcacgagtt tatttacagg catataaaat gaaattgtga gatgttttgc aagcttcttt      60
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tttgtgcaat aggttccaat atgcatttat tagacatctg tttaaatggt aatgtagcat     180
ttattttgct aaattgaaag ggaacataga tggaattcca aaatatgtac attcagctgt     240
ttggtttttc gtttttcatt gttattattg tgagaatgct gttattgggg ttgtgtgtga     300
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tcctggtgcc ttggaccccca cgtgcttgtg gccaggctgc ccctgggcgg ggccatgtgg     420
cctcagacca caagagcgga ctgccctggc ccaagcactg cagctgcctg cacccccggg     480
cttcgcagcc ttgcttgttt tctctgaaca gcaacagaac agggttcaca gcgattcaaa     540
gggtggcatt gggttggacg ttctgggtac aagccaacct agtcccacgt tgtacgtgaa     600
tgtttaatgt gctctcaaaa catggaaaat aagtttagtg cacatagcta aatcacaaaa     660
catccaattt ctctgtttcc tcaggaagtc attactgcgc caccacatca catgacctta     720
acatgatcaa tgtatttctc tgccttgaca tttaaataca taaattgaga taagtagatt     780
agaaaatcat tcaaatgata ccataatttg tacgggacag ggtgcgggca atggccacgt     840
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caacagtgcg tctgaggaac gagctgcagt ttgagcctc ccctgagatg tgcgtagcct     960
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acgaaggcag tcgaggtgtg gaggtgatca cgaagataca tgtgtttgac tgtttaattt    1140
gaaagtttac attttttatg ctttgtgttg gtgtgtaatt tttgtactct tggtggctag    1200
ttttttgtcaa atcttttttg gaatattgct taaatgtttt gatttatga tagtgaagct    1260
tgtattcagt gttttgccaa ttaatattat atgcttgtaa taaaagcaaa agaaaagctt    1320
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa                              1357
```

<210> 25
<211> 1313
<212> DNA
<213> Homo sapiens

<400> 25

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ctgcaggaat tcggcacgag gtcttgctgt gttgctaatg ttgaactcct ggccctaagt      60
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tttctaggtc tttcctgtca ggtccaccaa tattttagat ggatggagca cttgattaga     180
tcaggagtca aaattctatt cctgaatcta ttacttacca gttgtactac tttgaatgaa     240
tggcttaatt ttttagtgac tttgaattgt tccagatata aaatgacagg ataggtctag     300
agagttgcct tagatgaatt aggaaacagt tctgagata gagatgttag tgcagtaggt     360
ttattgggga gtgttctcag gaatgcctgt ggggaagtga aggatgtgga ggaggaagat     420
ggactggaat tcatttgcca gagtcctcag cagatcctac cagcwctaga gctgggatgg     480
cccttcagag ttatcctgat ccacaagggg tcagcccta ggcattcata agtcactttg     540
tccagtcatt ggggttgacc ccaggaaaag gtatggtttg gggtaagagg actcttcagt     600
tgagggtagt tcctaggaag ctagtgagct atgagttggc atcaggcaac atttccagca     660
atttggtcaa tgagttcccc ttaaggctgg atctgggcca cggaccatgg cactcactgc     720
catattcaca gcgtcgtttt cagtgtgaa ttctactgtg ttaaagtatt gtacagtcac     780
tgaaatgaga gtatttttat atttggctac ccatgacatt tattctcttc tgattatatt     840
gtttctctcc tgatctagag ttttagattg ttttgtttgt tttgtttttgt tttcctgtac     900
ttttctgtct gttgaggaaa aagagtttta ttcttctagt atgagagttt ctattagtc     960
tcctttttag acagatgaac accctgtgac aattcctttt gtcttttgt ggcgtgtaaa    1020
aaaaaagaaa tccataaata gagtcgttac gcaagtcttc atgagttaat ttctctctcc    1080
agttttctta ctactttttc cagttttcat tttcttcaac agaaagcttc ttcttctggc    1140
tggacacagc gctcacgcct gtagtcccag cactttggaa ggctgagggg gatgtaatcc    1200
cagcactttg gaaggctgaa ctcctgagtt caggagttcc agaccagcct gggcaacatg    1260
gcgawactcc caactctaca aaaaatacaa aaaaaaaaa aaaawactcg tag            1313
```

<210> 26
<211> 1003
```
```

<210> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (990)..(990)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1002)..(1002)
<223> n equals a,t,g, or c

<400> 26
```
aattcggcac gagttcctct cctcctgttt tgctacattc tcctcagtgg caaaaagttt      60
cactctacct ctgacagcat gtatattgca ccagtagcta acaaaaactg gtctagtcaa     120
accaaatggg cacaaaagaa ccaggatacc aaaagttaag ctcatacagc tgcaaaccat     180
atcacttctt ggtaacaatg cagacctcat aaacctaaag aagagaaaga aagaaaaact     240
tttgttactt tccttttttg cttgtcactt atatacaggc tatgtggaa tataatttgt      300
aggtataaca cattaagaaa aagttatctt cattggatag aattgaatgg tggtcgctga     360
taggaatagg gcgtcctcta gctcttatct ctgtctctta ctcttttctc tttctctttt     420
tctctgtcat gagactgtgt gtgacagggc cacctgtctt ttttttttc ttaaattttt      480
ttttcttttt atgtgtaggt gcatgtcttg gggatttaaa aatttcaagg ctggtttact     540
tatgcaaagc atgcctacgt ctggaatact tagggaaaga aagcgactcc atgttgtccg     600
aattcctcaa gggacagaaa aaaaattgga gactgttgaa atgcagattt gaagtaattt     660
ttttaaaata ttattttggg ttctgcgaca ttgtgaaaaattaaagttgt tgtgcaatac      720
ttaattcaga catgtaccac aagttaatgg tagactaaca ctggggggtg gggtctaggc     780
atcatgcttt tgtcagcata ctcttgagct tttaagtcta ctatgtctga actgtggttt     840
cttgtttatc cttttttcct tagttggact gtaatgtatg gtctgtcaac ctgtgaatct     900
ttaaagtatg attcaggtat tgttgtattc tttactgtgt aataaaaaag ttgaaaaaaa     960
aaaaaaaaaa acccaggggg gggcccggtn cctttccccc tnt                       1003
```

<210> 27
<211> 1963
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (335)..(335)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1959)..(1959)
<223> n equals a,t,g, or c

<400> 27
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ggatcctcgc ggcggcggcg gtgcttacag cctgagaaga gcgtctcgcc cgggagcggc      60
ggcggccatc gagacccacc caaggcgcgt ccccctcggc ctcccagcgc tcccaagccg     102
cagcggccgc gccccttcag ctagctcgct cgctcgctct gcttccctgc tgccggctgc     180
gcatggcktt ggcgttggcg gcgctggcgg cggtcgagcc gcctgcgcag ccggtaccag     240
cagttgcaga atgaagaaga gtctggagaa cctgaacagg ctgcaggtga tgctcctcca     300
ccttacagca gcatttctgc agagagcgca gcatnatttt gactacaagg atgagtctgg     360
gtttccaaag cccccatctt acaatgtagc tacaacactg cccagttatg atgaagcgga     420
gaggaccaag gctgaagcta ctatcccttt ggttcctggg agagatgagg attttgtggg     480
tcgggatgat tttgatgatg ctgaccagct gaggatagga aatgatggga ttttcatgtt     540
```

```
aacttttttc atggcattcc tctttaactg gattgggttt ttcctgtctt tttgcctgac    600
cacttcagct gcaggaaggt atggggccat ttcaggattt ggtctctctc taattaaatg    660
gatcctgatt gtcaggtttt ccacctattt ccctggatat tttgatggtc agtactggct    720
ctggtgggtg ttccttgttt taggctttct cctgtttctc agaggattta tcaattatgc    780
aaaagttcgg aagatgccag aaactttctc aaatctcccc aggaccagag ttctctttat    840
ttattaaaga tgttttctgg caaaggcctt cctgcattta tgaattctct ctcaagaagc    900
aagagaacac ctgcaggaag tgaatcaaga tgcagaacac agaggaataa tcactgctt    960
taaaaaaata aagtactgtt gaaaagatca tttctctcta tttgttccta ggtgtaaaat    1020
tttaatagtt aatgcagaat tctgtaatca ttgaatcatt agtggttaat gtttgaaaaa    1080
gctcttgcaa tcaagtctgt gatgtattaa taatgcctta tatattgttt gtagtcattt    1140
taagtagcat gagccatgtc cctgtagtcg gtaggggca gtcttgcttt attcatcctc    1200
catctcaaaa tgaacttgga attaaatatt gtaagatatg tataatgctg gccatttta    1260
aggggttttc tcaaaagtta aacttttgtt atgactgtgt ttttgcacat aatccatatt    1320
tgctgttcaa gttaatctag aaatttattc aattctgtat gaacacctg aagcaaaatc    1380
atagtgcaaa aatacattta aggtgtggtc aaaaataagt ctttaattgg taaataataa    1440
gcattaattt tttatagcct gtattcacaa ttctgcggta ccttattgta cctaagggat    1500
tctaaaggtg ttgtcactgt ataaaacaga aagcactagg atacaaatga agcttaatta    1560
ctaaaatgta attcttgaca ctctttctat aattagcgtt cttcacccc accccaccc    1620
ccacccccct tattttcctt ttgtctcctg gtgattaggc caaagtctgg gagtaaggag    1680
aggattaggt acttaggagc aaagaaagaa gtagcttgga acttttgaga tgatccctaa    1740
catactgtac tacttgcttt tacaatgtgt tagcagaaac catgggtta taatgtagaa    1800
tgatgtgctt tctgcccaag tggtaattca tcttggtttg ctatgttaaa actgtaaata    1860
caacagaaca ttaataaata tctcttgtgt agcaccttta aaaaaaaaaa aaaaaaaaaa    1920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaana aaa                       1963
```

                    ⌣

```
<210> 28
<211> 796
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (748)..(748)
<223> n equals a,t,g, or c

<400> 28
tcggcccgag aagaaatgtg acgcactctc accaagatgc tgaagctgac attcatcaat     60
aagcagctgt gcatccacta ggcatttggt aaatgttaac tatctaccg aggtggtgtt    120
ttcttagcct cccacctcct tgctgtggag cagcttcatg taccatgatg catattcaga    180
tcattcttaa tactcatatt ttgatagaga ggtttttagg ttttcttta aaccaagttt    240
attgagataa actactttgg taggatatgg aacttaggaa taatggtatg aaactagaca    300
gctttttttt ttttattaca ctttaagttc tgggatatgt gttcagaaca tgcaggtttg    360
ttacataggt atacacgtgc catggtggtt tgctgcaccc atcaacctgt catctgtatt    420
cggtgtttct cctaattcta tcccwccct accccctgc ccccaaaaag gccccagtgt    480
gtgatggtcc cctccctgtg tccatgtgtt ctcattgtc aactcccact tatgagtgag    540
aacatgaggt gtttggtttt ttcttcctgt gttagtttgc tgagaatgat ggcttccagc    600
ttcatccatg tccctkcaaa ggacatgaac tcagtccttt tttatggctg catagtattt    660
cgtggtatat aagtgccaca tttctcttat ycagtctayc atttgggttg gttccaaatc    720
tttgctattg tgaatagtgc cgcaatanac atacgtgtgc atgtgtcttt aaaaaaaaaa    780
aaaaaaaaaa ctcgag                                                     796
```

```
<210> 29
<211> 1256
<212> DNA
<213> Homo sapiens

<400> 29
```

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ctatgttcca tcattccttc ccaaagccac cggaagcat ccttctagga aaggtggagt      60
cggtagtgag aagccggagg tgcccctaca gacatacaag gagattgttc actgctgyga     120
ggagcaggtc ttaactctgg ccactgaaca gacctatgct gtggagggtg agacacccat     180
caaccgcctg tccctgctgc tctctggccg ggttcgtgtg agccaggatg ggcagtttct     240
gcactacatc tttccatacc agttcatgga ctctcctgag tgggaatcac tacagccttc     300
tgaggagggg gtgttccagg tcactctgac tgctgagacc tcatgtagct acatttcctg     360
gcccggaaa aagtctccatc ttcttctgac caaagagcga tacatctcct gcctcttctc     420
ggctctgctg ggatatgaca tctcggagaa gctacact ctcaatgaca agctctttgc     480
taagtttggg ctgcgctttg acatccgcct tcccagcctc taccatgtcc tgggtcccac     540
tgctgcagat gctggaccag agtccgagaa gggtgatgag gaagtctgtg agccagctgt     600
gtcccctcct caggccacac ccacctctct ccagcaaaca ccccccttgtt ctacccctcc     660
agctaccacc aactttcctg cacctcctac ccgggccagg ttgtccaggc cagacagtgg     720
catactggct tctagaattc ctctccagag ctactctcaa gttatatcca ggggacaggc     780
cccttggct ccaacccaca cgcctgaact ttaaggatca ttggactatc ttctctgtgg     840
ccagcgcagc tctcttctgt gttcacagaa tggccactga taggcaygcc tcttttccca     900
cccactggaa ggctcacagg caaggtgaga gaggacacag aaggtgccaa cactgtcgct     960
acagtaagga cctgaagtga ctttgagaaa ttcaccctca caaaccttcc ttcaggagca    1020
ggcattggta gtgcagaggc acagattccg tcctttacca gctgcagaat cttgggcag    1080
ttacatagcc tctgtgagcc tcatcggtaa acagtggggg ttatgaaacc cacctcacag    1140
ggttgttgtg aggatccaat gagttgattt aggtaagcac ctagcacatg ccgtggcacc    1200
aagtaagcac tcaataaatc actcaactcc ttaaaaaaaa aaaaaaaaaa ctcgag        1256
```

<210> 30
<211> 752
<212> DNA
<213> Homo sapiens

<400> 30
```
actgaacagt ggttaatcct gactctgttt ttgactgaca gttaacagtt acatgaacca      60
ttcatattac agctcttact taaatttgac caagccagga tatatctgtt aggccacatt     120
catttaggga tcatgttttc caaagcaggt ttgggcaaaa ttaatccaca ggactgaaag     180
gtatacatct gtgagttttg ttctcacttc cacctctaat ttgaagaaca ctttaattga     240
cacagaatac atttcacata tttaacctct acaataagtt ctgacacatt ttccatgaaa     300
caaaccatcg ctatattcaa gataatgaac ctatcatca tactcccaaa ttccttctkg     360
catctttgta atttctcact cttccttctc cctctccccg tccatccca accactgatc     420
tgctcaggca actaccaatc ttctttctgt cactatagat taatttgcat ttttaaagaa     480
atttacatac atggaaccat acatcatcta tgctttgtag tatgactcct gtcactcagt     540
acaattattt tgagattcat ttatgttawt gtatgtatca atagttcatc ccttttattg     600
gtaagtaaca tttttttgta taggtatacc atgatttgtt gatgaacaaa tttacctgtt     660
gatgaacatt tacgttgtta ccaagatttt tgctattgaa aataaagttt ttatgaatat     720
ttatatatat aaaaaaaaaa aaaaaaactc ga                                   752
```

<210> 31
<211> 2243
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (929)..(929)
<223> n equals a,t,g, or c

<400> 31
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tgcctccctt cctgcagatt gtggacagta gttcctcagc ctgcaccctg gattccttct      60
tcccttcct agctccatgg gactcgcccc aagactgtgg cttcaaggac cacagcccc     120
ttactcttca agccctgact gtggagttgg tagatgcctc tgatcctcag tattctctct     180
ggcaatgttc cacggcttct ccttcctggg agctggctcc ataacttgat tttccccaaa     240
```

```
cgtgttgcaa tccctgctgc cccttagcca cccagggtct tgtgtgggta tgagtgtaga   300
ggatggggggt atgccaggcc tgggccgtcc caggcaggcc cgctggaccc tgatgctact   360
cctatccact gccatgtacg gtgcccatgc cccattgctg gcactgtgcc atgtggacgg   420
ccgagtgccc ttycggccct cctcagccgt gctgctgact gagctgacca agctactgtt   480
atgcgccttc tcccttctgg taggctggca agcatggccc caggggccc caccctggcg   540
ccaggctgct cccttcgcac tatcagccct gctctatggc gctaacaaca acctggtgat   600
ctatcttcag cgttacatgg accccagcac ctaccaggtg ctgagtaatc tcaagattgg   660
aagcacagct gtgctctact gcctctgcct ccggcaccgc ctctctgtgc gtcaggggtt   720
agcgctgctg ctgctgatgg ctgcgggagc ctgctatgca gcaggggggcc ttcaagttcc   780
cgggaacacc cttcccagtc cccctccagc agctgctgcc agccccatgc ccctgcatat   840
cactccgcta ggcctgctgc tcctcattct gtactgcctc atctcaggct tgtcgtcagt   900
gtacacagag ctgctcatga agcgacagng gctgcccctg gacttcaga acctcttcct   960
ctacactttt ggtgtgcttc tgaatctagg tctgcatgct ggcggcggct ctggcccagg  1020
sctcctggaa ggtttctcag gatgggcagc actcgtggtg ctgagccagg cactaaatgg  1080
actgctcatg tctgctgtca tgaagcatgg cagcagcatc acacgcctct tgtggtgtc  1140
ctgctcgctg gtggtcaacg ccgtgctctc agcagtcctg ctacggctgc agctcacagc  1200
cgccttcttc ctggccacat tgctcattgg cctggccatg cgcctgtact atggcagccg  1260
ctagtccctg acaacttcca ccctgattcc ggaccctgta gattgggcgc caccaccaga  1320
tccccctccc aggccttcct ccctctccca tcagcgccc tgtaacaagt gccttgtgag  1380
aaaagctgga gaagtgaggg cagccaggtt attctctgga ggttggtgga tgaaggggta  1440
cccctaggag atgtgaagtg tgggtttggt taaggaaatg cttaccatcc cccaccccca  1500
accaagttct tccagactaa agaattaagg taacatcaat acctaggcct gagaaataac  1560
cccatccttg ttgggcagct ccctgctttg tcctgcatga acagagttga tgaaagtggg  1620
gtgtgggcaa caagtggctt tccttgccta ctttagtcac ccagcagagc cactggagct  1680
ggctagtcca gcccagccat ggtgcatgac tcttccataa gggatcctca cccttccact  1740
ttcatgcaag aaggcccagt tgccacagat tatacaacca ttacccaaac cactctgaca  1800
gtctcctcca gttccagcaa tgcctagaga catgctccct gccctctcca cagtgctgct  1860
ccccacacct agcctttgtt ctggaaaccc cagagagggc tgggcttgac tcatctcagg  1920
gaatgtagcc cctgggccct ggcttaagcc gacactcctg acctctctgt tcaccctgag  1980
ggctgtcttg aagcccgcta cccactctga ggctcctagg aggtaccatg cttcccactc  2040
tggggcctgc ccctgcctag cagtctccca gctcccaaca gcctggggaa gctctgcaca  2100
gagtgacctg agaccaggta caggaaacct gtagctcaat cagtgtctct wtaactgcat  2160
aagcaataag atcttaataa agtcttctag ctgtagggt ggttcctaca accacagcca  2220
aaaaaaaaaa aaaaaaactc gag                                          2243
```

<210> 32
<211> 1624
<212> DNA
<213> Homo sapiens

<400> 32
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ggcacgaggt cgccgccgcg gccgcctgga attgtgggag ttgtgtctgc cactcggctg    60
ccggaggcga aggtccctga ctatggctcc ccagagcctg ccttcatcta ggatggctcc   120
tctgggcatg ctgcttgggc tgctgatggc cgcctgcttc accttctgcc tcagtcatca   180
gaacctgaag gagtttgccc tgaccaaccc agagaagagc agcaccaaag aaacrgagag   240
aaaagaaacc aaagccgagg aggagcugga tgccgaagtc ctggaggtgt tccacccgac   300
gcatgagtgg caggcccttc agccagggca ggctgtccct gcaggatccc acgtacggct   360
gaatcttcag actggggaaa gagaggcaaa actccaatat gaggacaagt tccgaaataa   420
tttgaaaggc aaaaggctgg atatcaacac caacacctac acatctcagg atctcagaag   480
tgcactggca aaattcaagg agggggcaga gatggagagt tcaaaggaag acaaggcaag   540
gcaggctgag gtaaagcggc tcttccgccc cattgaggaa ctgaagaaag actttgatga   600
gctgaatgtt gtcattgaga ctgacatgca gatcatggta cggctgatca acaagttcaa   660
tagttccagc tccagtttgg aagagaagat tgctgcgctc tttgatcttg aatattatgt   720
ccatcagatg gacaatgcgc aggacctgct ttcctttggt ggtcttcaag tggtgatcaa   780
tgggctgaac agcacagagc ccctcgtgaa ggagtatgct gcgtttgtgc tgggcgctgc   840
cttttccagc aaccccaagg tccaggtgga ggccatcgaa gggggagccc gcagaagct   900
gctggtcatc ctggccacgg agcagccgct cactgcaaag aagaaggtcc tgtttgcact   960
```

58

```
gtgctccctg ctgcgccact tcccctatgc ccagcggcag ttcctgaagc tcggggggct    1020
gcaggtcctg aggaccctgg tgcaggagaa gggcacggag gtgctcgccg tgcgcgtggt    1080
cacactgctc tacgacctgg tcacggagaa gatgttcgcc gaggaggagg ctgagctgac    1140
ccaggagatg tccccagaga agctgcagca gtatcgccag gtacacctcc tgccaggcct    1200
gtgggaacag ggctggtgcg agatcacggc ccacctcctg gcgctgcccg agcatgatgc    1260
ccgtgagaag gtgctgcaga cactgggcgt cctcctgacc acctgcgggg accgctaccg    1320
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cagcctggag ctgcaggatg gtgaggacga gggctacttc caggagctgc tgggctctgt    1440
caacagcttg ctgaaggagc tgagatgagg ccccacacca ggactggact gggatgccgc    1500
tagtgaggct gaggggtgcc agcgtgggtg ggcttctcag gcaggaggac atcttggcag    1560
tgctggcttg gccattaaat ggaaacctga aggccaaaaa aaaaaaaaaa aaaaaaaaaa    1620
aaaa                                                                 1624
```

<210> 33
<211> 879
<212> DNA
<213> Homo sapiens

<400> 33
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gctgcatgct gggcgggaac taggaagcct ccccaacctc tggccccgtg gagccctcag      60
cctcagctgc agtggaggca cctcgggctc tggggcaacc aagtgtgaca ggtggctgtg     120
cacgggcaga ggtcctgtgg aagatttcat gtgacgggca gaagaggagg aggaggcagg     180
ggaggaagca catccatgaa cagggctgtc tgggggcagc ctgggtggtc gtgaaatagg     240
actcagtggc cttgagtcct catttaggcc ctgatgttct ttagcctgcc tggcctttgg     300
caaatcgcca gcttcacgca caacctcatt tttcaccttt gggtgtgggg gtcagagtcg     360
ggagagcacc tgcaaagcca caatgatcca gacacacggc aagtgggca cattcccatc      420
aggctcctcg gggagagcag cgcttctgtg cccgggagca gcgaaggtca cacaggagga     480
cccgcacctc ctcgtgtcgg tggctccgct ggtataatca ggactcacgt ggtgttcctc     540
gtgtcgtggc ccttattgca gagggagcag cacaggcttt cctggaagct cccctcggtc     600
atgtggggtg actccagaga rccccacctt gcgagactgg accagtccaa gtggcctkga    660
gccacarcgg cctkgcagta cctkgggagg gggtgatgac aggtgcacac ggaggcccat     720
gtggtctgtc tggagaatgc cggagatgtg aaatatgtaa tcctgagtgt ggcttctaga     780
aggaaggttc gcaaagctga atatccactc gtgctgtcc cttctcacag gagattcctg      840
tcaacgtccg attctgcctc gaaggcagga ggagtaagg                            879
```

<210> 34
<211> 2761
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1006)..(1006)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1376)..(1376)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2211)..(2211)
<223> n equals a,t,g, or c

<400> 34
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gattaaaatt tatttaataa taaggggagg aataaaataa ctatgcattt ttttgttgaa      60
```

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agcacaattg tgtctgatac tttaattaca ctatctaatt taacctttca taaatgccca    120
gaatatgaga atatcatcca agatttaaat accaattacc aaaatttaca gctatcaaat    180
ggaagactca ggtttatgct atgccacgtt ttctcttctt tcctttttgt gatggtgttc    240
caaattgtgg agaaagaaaa cattctattt gtgattgctt ctgctagtta cttcgcaaa     300
acaaactact caaattcagt ggtgtgatgc aataaccatt tgtcatcctc atatattctg    360
gggtcagggg tcaaaaatgc aaagtggggt gacatctcgt ggtctacagt aattggggcc    420
tctgagaatt cctagctatc taggaatgaa ttaaacgttg gacaatgaag ttttctgaaa    480
gcttctttac gtttggctcc tgcatkggta tgacttaaag gctgcgctca aaataatctc    540
ttaaccagag kgtctgaata ttgcttcttc atgtaacttg agcttcctca caacatggaa    600
tcatacaggt agcttgcctg agtgttgcag ttaatgggtc aatgtattgc ctttaataat    660
cttgcctcag aagtcacata gaattacttt aatgctgagt tggtttaagcaatcacagcc    720
tgtctgactt caggggggaag aaacatgatg tctacccttt gatgtgagga cattcaaagt    780
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c                                                                    2761
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<210> 35
<211> 755
<212> DNA
<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

60

<220>
<221> misc_feature
<222> (733)..(734)
<223> n equals a,t,g, or c

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agacaggagc tggggctctg catctcacag cggtgcctgt cagacaggaa gaagtcccgc   180
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ttgatcagcc cacgcagacc tatggtgcag ttcgaggtga tctttctcct tttcgggttg   300
tgcttcagca gttcaagctc ccgtttggtt ggttcccaag ttgaaaactt ctctccaacg   360
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acacagtaga ggcaggaatg cagcctgttg aggtggacgc cacagacatg gcagatacag   600
gacttggcct tgcgcttgcg ggcctcagcc gtgccgctcc acacgaagca ctggtagatg   660
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<210> 36
<211> 2089
<212> DNA
<213> Homo sapiens

<220>
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<222> (774)..(774)
<223> n equals a,t,g, or c

<400> 36
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tcttcctccc catcaggggc agtgcccacg tctttggagc tgcagcgagg gacggatggc   180
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acagtggtcc ctactctcgt gactccctcg gccctggga ataggactgt ggacctcttc   300
ccagtcttac cgatctgtgt ctgtgacttg actcctggag cctgcgtat aaattgctgc   360
tgcgacaggg actgctatct tctccatccg aggacagttt tctccttctg ccttccaggc   420
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aacaactcaa acttaaacta tttccagaag cttcaaaagg tcaatgcaac caacttccag   600
gccctggctg cagagtttgg aggcgaatca ttcacttcaa cattccaaac wcaatcacca   660
ccatcttttt acagggctgg ggaccccatt cttacttact tccccaagtg gtctgtaata   720
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aatgcaatat ctggatgcaa gctcaggttg aagaaggcag actgcagcca cttgcagcag   1380
gagatttatc agactcttca tggaaggccc agaccagagt atgttgccat ctttggtaat   1440
gctgacccag cccagaaagg agggtggacc aggatcctca acaggcactg cagcatttca   1500
gctataaact gtacttcctg ctgtctcata ccagtttccc tggagatcca ggtattgtgg   1560

61

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aactttgtgg acattaccca gaagccacag cctccaaggg gccaacccaa aatggactgg    1740
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aaatgctcag tctctcccat ccttatcctg tgcctcttac tacttggagt tctcaaccta    1860
gagactatgt gaagaaaaga aaataatcag atttcagttt tccctatgag aaactctgag    1920
gcagccactt atcttggcta aatagaacct cacctgctca tgaccagaga gcatttagga    1980
taatagagga cctaactgaa ggatccttg tatatgaaag gagttatttt agaaaagcaa     2040
taaaaatatt ttattcatma aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                 2089


<210> 37
<211> 785
<212> DNA
<213> Homo sapiens


<400> 37
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aaatcagatt gccaggaaga aataggacgt gacggtactg ggccctgtga ttctcccagc    180
ccttgcagtc cgctaggtga gaggaaaagc tctttacttc cgcccctggc agggacttct    240
gggttatggg agaaaccaga gatgggaatg aggaaaatat gaactacagc agaagcccct    300
gggcagctgt gatggagccc ctgacattac tcttcttgca tctgtcctgc cttctttccc    360
tctgcgaggc agtggggtgg gattcagagt gcttagtctg ctcactggga gaagaagagt    420
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tctgtacgtt ggggactgcc tgtatttgga agatttaaaa acctagcatc ctgttctcac    540
cctctaagct gcattgagaa atgactcgtc tctgtatttg tattaagcct taacactttt    600
cttaagtgca ttcggtgcca acatttttta gagctgtacc aaaacaaaaa gcctgtactc    660
acatcacaat gtcattttga taggagcgtt ttgttatttt tacaaggcag aatgggggtgt    720
aacagttgaa ttaaacttag caatcacgtg ctcaaaaaaa aaaaaaaaaa aaaaagggcg    780
gccgc                                                                785


<210> 38
<211> 1458
<212> DNA
<213> Homo sapiens


<400> 38
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ctgtaattaa gatgagatca gtttcttaga aaaagctttc ctgaatccct ctgacgttgc    180
ctgggatctt tctgttgatt cgtcttttct ggagattggg acagagcatc tgtggtccag    240
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cttttagtt taatagcatc tttaattaga tcacagcatt gaattcaaaa tttcttctgc    540
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gaaaacaagg aaggaggccg ggcgcagtgg ctcacgcctg taatcccagc actttgggag    720
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tgagtcgaga tcgcgccagt gcactccagc ctgggcaaga agagcgaaac tgggtctcaa    960
gttaaaaaaa gaaagcaagg aaagagtaat ttacaacgaa ggaaaaaaac ccacagcaca   1020
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gaggtgtggg gagcccagcc cctggccctg cctcccgcgc cccgctcccc ttctctctct   1140
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ttgtaccata ttgtaaatta tattatttat tctttaccaa ttttgggaat aaaaggtgtt      1320
ttggttattt aatataataa gagctgttaa acttctgttt aaatttccag ttcaacttgt      1380
aaatgttttt attgtgcata aatacatact aatgttgatc taaaaaaaaa aaaaaaaaaa      1440
aaaaaaaaaa aaaaaaaa                                                    1458


<210> 39
<211> 2657
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (179)..(179)
<223> n equals a,t,g, or c

<400> 39
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tatgtacagt tctctgtgtt aacagctgag aagtaagcaa ccttttctga ctgcatatng       180
gtgtattcct cttttgagtc cccataatat tttataaatt gtaatgcccc atcttgtact       240
acagttgtct tattcgtatt gtttataaac tttgagggtt aggactgggt cttactcatc       300
tttatgtgcc ttccttatgc ttcaaagaat ttaccatcta atggaagaga acatttgcaa       360
gttggctcca taccaagctc cttccacata ctctactcat ctgaactttg aatgcagaat       420
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ctcctcacat tgcttttgct accactggaa gttccttctg tttcttgtgg agtacctttt       606
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aaatacaggt tgataaatgc taaactgtct ccaaaccaga cttcatccta gcctccacac       840
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63

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accgatcgcc cttcccaaca gttgcgcagc ctgaatggcg aatgggacgc gccctgtagc    2580
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ggccctagcg gcccgct                                                   2657


<210> 40
<211> 1503
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (6)..(6)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (18)..(18)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (41)..(41)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (1501)..(1501)
<223> n equals a,t,g, or c


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gaaaaggaaa gagcgccaag ctgctagaca ggctccaga agcactgcgt atgaagatta      180
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64

naa   1503

<210> 41
<211> 1280
<212> DNA
<213> Homo sapiens

<400> 41
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gcaccattat tcttttttata aaatacttta ctttttaaatt tttacccaac tacgtctatg   1140
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aaccacaagt cattcatgac   1280

<210> 42
<211> 742
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (707)..(707)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (724)..(724)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (726)..(726)
<223> n equals a,t,g, or c

<400> 42
gcgctcgaga atagtgggtc ccccggrctg caggattcgg cacgagctca cttcaatyct   60
tctttgagaa gtttttcctt tctccgcaac agatgtaca tatttgaact ctctttgtac   120
ttggagggca cttcttttcgt ggtagttctt ttatttttat taatctctgt atccttagat   180
agtcctccaa caaccaaagg ttgggactct gtcttacata tctgggtgcc cctcatagtg   240
cagtaataag taagttgatt atatacgagc tatgtaactt atatttttta atggttggat   300

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atcactgagt tttttttttt aagaattttt ttattgaggt aaacttcaca taacataaaa    360
ttaactattt taaagtgaga agttcagtgc cacttagtat tgttaacaat gttgcataac    420
caccaccttt atttaaagtt ccaaaaaaaa tgttctcctc taaaaggaaa ccccatccca    480
ttaagcagat actctccatt ccttccttcc tccagccccc agcaaccacc aatctgcttt    540
ctgtctctat ggatttatct attcttgcta ttttatataa atcgaattgt atgagacctt    600
ttgtgtctgg cttctttcac ttagtacaag tttttgagat ttatttacat agtagcatgt    660
atcaacactt cattttatg gccaaataaa attgtattat gtgtttntag cacaaaaaa    720
aaananaaaa atgaccctcg ag                                            742


<210> 43
<211> 1472
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 43
ncttagctgt agatagaggc ggcaacctcg gaagtgcgga gcgggtgggc ctatatagat     60
gttgaggtgc ggaggccgtg ggctttttgtt gggcctggct gtagccgcag cagcggtaat    120
ggcagcacgg cttatgggct ggtgggggtcc ccgcgctggc tttcgccttt tcataccgga    180
ggagctgtct cgctaccgcg gcggcccagg ggacccgggc ctgtacttgg cgttgctcgg    240
ccgtgtctac gatgtgtcct ccggccggag gcactacgag cctgggtccc actatagcgg    300
cttcgcaggc cgagacgcat ccagagcttt cgtgaccggg gactgttctg aagcaggcct    360
cgtggatgac gtatccgacc tgtcagccgc tgagatgctg acacttcaca attggctttc    420
attctatgag aagaattatg tgtgttgg gaggtgaca ggacggttct acggagagga    480
tgggctgccc accccggcac tgacccaggt agaagctgcg atcaccagag gcttggaggc    540
caacaaacta cagctgcaag agaagcagac attcccgccg tgcaacgcgg agtggagctc    600
agccaggggc agccggctct ggtgctccca gaagagtgga ggtgtgagca gagctggat    660
tggcgtcccc aggaagctgt ataagccagg tgctaaggag ccccgctgcg tgtgtgtgag    720
aaccaccggc ccccctagtg gccagatgcc ggacaaccct ccacacagaa atcgtgggga    780
cctggaccac ccaaacttgg cagagtacac aggctgccca ccgctagcca tcacatgctc    840
ctttccactc taagccgtag cctcttctgt taataacaca cagagagctc tgccaagcac    900
ctgagtaggc ccttgacact tgtgtgccct gggatgcctc ctggcgcgaa tcaggaggtt    960
ctggaaggac tctggctata ttctgcaaat gtggctcatg ccccttaccg tggctcggcg   1020
ttgtggtgcc tgaggacag ccggccacct gcccagtact ggtcagctt tcaacactat   1080
tccctttgac ctactggcca tcttcctcac agccctcaga tatcaacggg cacaaataag   1140
accaactcaa tttccacttg aatttacaac caaaagcctg ctgagttgat tacagctggg   1200
ccaatacagt acgaggcaat aacaaattag tgtgggttga ttctggaatt ggaaaagctt   1260
ttgcttgtat ggatacagca aatccagatg tctctgaaca aagcaacaat ttaaagcaac   1320
gacattttct gtcctttaag cacttaaaat caggtgtggt gtgttttcaa aggcagaagt   1380
ctgcattttg agcaaaaggt ggcttcccag ctctaacaag gtaactggtt agcatgacat   1440
taaagcttgg gcaaggcttc aaacttaaaa aa                                 1472


<210> 44
<211> 635
<212> DNA
<213> Homo sapiens

<400> 44
gcctaaagag agctccccca ggaccagccc tggccaaggg attgctgcag ccctcatcca     60
ccttccaagc actggaaaca aacattggag accaagtgag gcgtcactca acagccgtag    120
taatcaggga aatgacaagt tacatactga tatcctttgt tttgctgatt ggagttgggt    180
gcattgaaaa agatcagtcg tgcccagtgt ttgggggaag gaagcgtctt cacctgttgt    240
ttgtgggagg acagttgagg caggtgagga tgctgagagg tgagctcagc tgtgcctgtt    300
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66

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accgtccaca tgtgcaagcc cttcagctcg gtggttgtac ttgtttttga gatgcagttt    360
cactcttgtc acccaggctg gagtgcatgg catgatcttg gctcgctgca acatccgcct    420
cccgggttca agcgattctc ctgtctctac taaaaataca aaaattagct gggtgtggtg    480
gtgcgtgcct ttaatcccag ctactcagaa ggctgaggtg caagaattgc ttgaacctgg    540
gaggtggagg ttgccgtggg ccgagatcac gccaccgcac tccagcctag gcaacagagc    600
tagactgtct caaaaaaaaa aaaatgaccc tcgag                               635

<210> 45
<211> 1153
<212> DNA
<213> Homo sapiens

<400> 45
ggattaaggt gtggtccctg gaccatgccc aacggcatag gcagacttg aaaactggct      60
aaaaacgcag actctcaggc cccgggccag agctactgaa tcaaaatctg catgawcaca     120
ggagcagccc tctggcccat aatgacggcc ctgtcttcgc aggtggccac tcgggcccgc     180
agccgctggg taagggtgat gcctagcctg gcttattgca ccttcctttt ggcggttggc     240
ttgtcgcgaa tcttcatctt agcacatttc cctcaccagg tgctggctgg cctaataact     300
ggcgctgtcc tgggctggct gatgactccc cgagtgccta tggagcggga gctaagcttc     360
tatgggttga ctgcactggc cctcatgcta ggcaccagcc tcatctattg gaccctcttt     420
acactgggcc tggatctttc ttggtccatc agcctagcct tcaagtggtg tgagcggcct     480
gagtggatac acgtggatag ccggcccttt gcctccctga gccgtgactc aggggctgcc     540
ctgggcctgg gcattgcctt gcactctccc tgctatgccc aggtgcgtcg ggcacagctg     600
ggaaatggcc agaagatagc ctgccttgtg ctggccatgg ggctgctggg cccctggac       660
tggctgggcc acccccctca gatcagcctc ttctacattt tcaatttcct caagtacacc     720
ctctggccat gcctagtcct ggccctcgtg ccctgggcag tgcacatgtt cagtgcccag     780
gaagcaccgc ccatccactc ttcctgactt cttgtgtgcc tccctttcct ttccctccca     840
caaagccaac actctgtgac caccacactc caggggcag ccccatcccc ttccagcccc       900
taagtaggcc ctcccctccc taaatctgct tccgcaccac ctggtcttag ccccaaagat     960
gggccttctc tctcccagat aagttggtcc tccctctgcc tttcctctca agcccccaaa    1020
gagcaaaggc aacagcaaga ccagcgggtt cttgcaacac tgtgaggggc agccagggcg    1008
gccccaataa agcccttgaa tactttraaa aaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1140
aaatgaccct cga                                                      1153

<210> 46
<211> 729
<212> DNA
<213> Homo sapiens

<400> 46
ggcacgagca ggaaccctgt cagcagaaac ttctcagcc ccatccttgc caggaagctc      60
tgtgaaggtg ctgctgatga cccagattcc tccatggtcc tcctgtgtct cctgttggtg    120
cccctcctgc tcagtctctt tgtactgggg ctatttcttt ggtttctgaa gagagagaga    180
caagaagagt acattgaaga gaagaagaga gtggacattt gtcgggaaac tcctaacata    240
tgcccccatt ctggagagaa cacagagtac gacacaatcc ctcacactaa tagaacaatc    300
ctaaaggaag atccagcaaa tacggtttac tccactgtgg aaataccgaa aaagatggaa    360
aatccccact cactgctcac gatgccagac acaccaaggc tatttgccta tgagaatgtt    420
atctagacag cagtgcactc ccctaagtct ctgctcaaaa aaaaacaat tctcggccca      480
aagaaacaa tcagaagaat tcactgattt gactagaaac atcaaggag aatgaagaac       540
gttgactttt ttccaggata aattatctct gatgcttctt tagatttaag agttcataat    600
tccatccact gctgagaaat ctcctcaaac ccagaaggtt taatcacttc atcccaaaaa    660
tgggattgtg aatgtcagca aaccataaaa aaagtgctta gaagtaaaaa aaaaaaaaa     720
aaaaaaaaa                                                            729

<210> 47
<211> 1079
<212> DNA
```

67

<213> Homo sapiens

<400> 47
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ggcacgagcc aatttgccaa ggttctaaag gttatgagg tcctgaagga gccaggcctt      60
gtgatggagt aggtgacaca ggcctggttg tcctgtcagc agaagggaaa gcaggggctg     120
ggctgagagg aggacacgga gggctctgct gaggttcctt cctgggttcc accaacaggg     180
acagggagtc acttgccttc cagttctgtg ctgggatggc gggacagcac ttggcttgct     240
tggccagctg cgtcatgagt ttgatttggt ttttttttt ttgcagctgc ttcatatgct     300
ctgctccagc ccctccccaa cagctggtag cttatggttt cttcaagagg aaagtagact     360
ttatgctgta catttgagct gtagagctaa gattcgctta ctggtgagct gtgaaacctt     420
gttgctttt cccagagtct gatggagtg actgtgatca agggaatctt caccgccaca     480
agtgcaggca gcaggtgtgg ttcaggtccc cccccacccc actgtgctcc tttgaagcca     540
acgtgcctcc ctcgcctcca tactggaggg acgacgcagg ggagaacaga gaagtgcttg     600
gccctaggat tgaggcactt gtttcctagc ccgctgggtt agggctggtg caagcgagc     660
aatgttgagg atgctttaag cactaccagc cgaatccggg aactctgtta acagttgtcc     720
aaccagcaga atgaggctaa ctgtataaag catgggaccc aggatgagga taaggaaagg     780
acagcggctt tccctgggca gtacaatggc ttgaaggcaa aaagggataa agtgacagcc     840
gactgtgact ctggtgagga ggggtgagca gggaggttga ttctctgatg ttaactaagt     900
ggcaaagtct caaccgtgct cagccctccc cctcccaggg aagagaaaca aagattcaaa     960
gtaagcatga tactagtggg tttaccagtg tttcttccaa ggagacatat attttttaat    1020
aaacgatagt tgcaatgaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaa        1079
```

<210> 48
<211> 1959
<212> DNA
<213> Homo sapiens

<400> 48
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ttaaggttgc cgctagccgc ctgggaattt aagggaccca cactaccttc ccgaagttga      60
aggcaagcgg tgattgtttg tagacggcgc tttgtcatgg gacctgtgcg gttgggaata     120
ttgctttttcc ttttttggc cgtgcacgag gcttgggctg ggatgttgaa ggaggaggac     180
gatgacacag aacgcttgcc cagcaaatgc gaagtgtgta agctgctgag cacagagcta     240
caggcggaac tgagtcgcac cggtcgatct cgagaggtgc tggagctggg gcaggtgctg     300
gatacaggca agaggaagag acacgtgcct tacgacgttt cagagacaag gtggaagag     360
gccttagaga atttatgtga gcggatcctg gactatagtg ttcacgctga gcgcaaggc     420
tcactgagat atgccaaggg tcagagtcag accatggcaa cactgaaagg cctagtgcag     480
aaggggtga aggtggatct ggggatccct ctggagcttt gggatgagcc cagcgtggag     540
gtcacatacc tcaagagca gtgtgagacc atgttggagg agtttgaaga cattgtggga     600
gactggtact tccaccatca ggagcagccc ctacaaaatt ttctctgtga aggtcatgtg     660
ctcccagctg ctgaaactgc atgtctacag gaaacttgga ctggaaagga gatcacagat     720
ggggaagaga aaacagaagg ggaggaagag caggaggagg aggaggaga ggaggaagag     780
gaagggggag acaagatgac caagacagga agccacccca aacttgaccg agaagatctt     840
tgacccttgc ctttgagccc ccaggagggg aagggatcat ggagagccct ctaaagcctg     900
cactctccct gctccacagc tttcagggtg tgtttatgag tgactccacc caagcttgta     960
gctgttctct cccatctaac ctcaggcaag atcctggtga aacagcatga catggcttct    1020
ggggtggagg gtgggggtgg aggtcctgct cctagagatg aactctatcc agccccttaa    1080
ttggcaggtg tatgtgctga cagtactgaa agctttcctc tttaactgat cccaccccca    1140
cccaaaagtc agcagtggca ctggagctgt gggctttggg gagtcactt agctccttaa    1200
ggtctgtttt tagacccttc caaggaagag gccagaacgg acattctctg cgatctatat    1260
acattgcctg tatccaggag gctacacacc agcaaaccgt gaaggagaat gggacactgg    1320
gtcatggcct ggagttgctg ataatttagg tgggatagat acttggtcta cttaagctca    1380
atgtaaccca gagcccacca tatagtttta taggtgctca attttctata tcggcctatt    1440
aaacctttgt tacctattgt ttccttaaca caaaacgatc acacaccaca acacacgcaa    1500
cccagacaca aacaaccaac accagagcgc gccacacaac acacgagg gaggcgacgt    1560
gaaaaagata actacacaga gaggcgcaca cagatacag taatagaaac atatatatt    1620
ataaaggtg cacccataag acgatgcgtc actataataa acctacacga cagaacagcc    1680
agcacgccat tgtacaacag ccgacgccac cagcagcgga ccaaaacaac tccatcagct    1740
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                                        68
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ggactcactg cgttggaaag gaggaagcca ccaaccctcg cgtgagcgca gctacaccca    1800
ctgggaccca acacccaccg cacagagtta accacgccgc cgtgacattc tacacgaaca    1860
ccgacgcgtc ttgggtatcc acaaacccag tataatgagc agcagagaaa aacgcatgat    1920
gacgactgat tagattcagc gcgccgcaac gtaatgacg                           1959

<210> 49
<211> 812
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)..(17)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (108)..(108)
<223> n equals a,t,g, or c

<400> 49
gaccatttttt agccaanctt ggaattaacc ctcacttaag ggaacaaaag ctggagcttc     06
caccgcgttg gcggccgctc tagaactagt ggatcccccg ggctgcanga attcggccac    120
gagaggactt ccccacctca tgcagctatt tgggccgtgg cgtctgaaat ttattatttc    180
agagtcaccc cttttratgac cttggcagtg ractgcagtc atctgtttag gcctttccat    240
ggcccacgtc aatgccgtta tttctgtttg ttgcacattt gatttccttg ttgttggcat    300
ttagaaggcc ccctgcttcc cagatcacac cacgggcatg gaccacagag attgcatctt    360
gtgagtctgt agaaatggtc aaggccttgt cctctcttag gtccagagct caggtgaatg    420
cagattttcc cggccatctg tgctgaagtc cctgtgggga ggctcctggc tggtttcctg    480
taggtagaca gctacacgtc ctgcccttca ttggcttctt ttcatgaagc tcctgccatc    540
tacaaaacat gtctcccttc ttgaatcaca tctctgttat tgaagctctg gaagtcaacc    600
gggcgtggtg gctatgccta taatcccagc attttgggat gccggggcgg gtggatcacc    660
tgaggtcagg agttcgggac cagcctggcc aacatggcga aaccccgtct ctaatacaag    720
tgcaaaaatt ggccaggcgt ggtggtcact gtgctccagc ctgggtgaca gagcgagctc    780
cgtctcaaaa aaaaaaaaaa aaaaaactcg ag                                    812

<210> 50
<211> 1756
<212> DNA
<213> Homo sapiens

<400> 50
ggcacgagtt ttcctctcac atatatattg ttttgtgtcc ctggctaaag tacaagcttt     60
ttgaaggcag aaaccatgtc tttggtttct tttgtatttc ccatagcacc ttttactgtg    120
agagtgggca cacagtatat gttgtggaat gacatcctga gtgatccctc cctggctggg    180
cctcagatta aattccctga aatgaacag tcctaaccaa cacaggacag gtattctcca    240
tctggcatgt tggttgctcc tttcaacctg ctatttgaaa tggctccctt caacatcttt    300
ctgttcccac agtgggggctt gctatggcta atgctgtact tgctgtatgt gttccaggcg    360
agtctgcgga caccagaact gacctgggag cgagtgagat ctcaagttga ccagtatat    420
ggcctgatgg caagaggata gtactgctgg cagaggtaag ctgagactgg caaaaatact    480
cccccacaac aggagagact gcaatcccca ggtcccctcc tcctcatgtt ctcgaatact    540
ttcaactcct ctgttaagca caagtttgac tactttccca atggatttta cttctaattg    600
tgaaagatct tttcattcag caattaagaa actatttggg ttccccactt ttcaccaatt    660
atcctgtctc tccacgtcaa tccacaggtt gagttagata attattacta tagaaggaat    720
tcacagatag aaccagtgcc actttgagtg atgcatacaa agagataatg tcacttgtgg    780
gatgtttttaa tcactaagca caaagtagat atgcccgact gtaaccaggactatcttagg    840
caagttctgg gaatgtatgt ttttactgat agattccctg tttttgaagt ccattcccctt    900
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69

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gaattgagcc agatgagtat aggtacctac ctagatatca attgctcaat tgatatttcc      960
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agtgtttgac cacttttcct ttcttaaaag ctcctcttcc ctagtcctgg attcctgaca     1080
gctataatat tagatgcctt ctattcttac cttgaagctt tctcttcttc agagaaagat     1140
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aggggcccat aagttaggag ttttttagtgt ccttactgtt tcttcacatt ttcctcactt     1320
tatctcatct tctcagatac ttcagggcat ttgtaaaggg actgaactat ttcttcacaa     1380
ggaaggagta tatatgagga ggagatgggc agattgccaa atatgcatta atagctttga     1440
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ttggtgacaa aagcaagtac catgggtgtt tttggctaga tggttgagca aaaaggtggt     1560
caggcttcat aggaaacaaa ataggaaagg gtggcattgg gggcaatttc tagttcttct     1620
actgtctgaa tcaccaactc aaaatacaag gctgacaaǧ ctgtctttga attcaggaga     1680
agcaaactga aggagaagca caaaaatcat cacagctatg gtgaaaccct gtctctacaa     1740
aaaaaaaaaa aaaaaa                                                       1756


<210> 51
<211> 2098
<212> DNA
<213> Homo sapiens

<400> 51
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tattttctgc tgggaatcac actcctgcgc tcatacatgc agagcgtgtg gaccgaagag      120
tctcaatgca ccttgctgaa tgcgtccatc acggaaacat ttaattgctc cttcagctgt      180
ggtccagact gctggaaact ttctcagtac ccctgcctccaggtgtacgt taacctgact      240
tcttccgggg aaaagctcct cctctaccac acagaagaga caataaaaat caatcagaag      300
tgctcctata tacctaaatg tggaaaaaat tttgaagaat ccatgtccct ggtgaatgtt      360
gtcatggaaa acttcaggaa gtatcaacac ttctcctgct attctgaccc agaaggaaac      420
cagaagagtg ttatcctaac aaaactctac agttccaacg tgctgttcca ttcactcttc      480
tggccaacct gtatgatggc tggggggtgtg gcaattgttg ccatggtgaa acttacacag      540
tacctctccc tactatgtga gaggatccaa cggatcaata gataaatgca aaaatggata      600
aaataatttt tgttaaagct caaatactgt tttctttcat tcttcaccaa agaaccttaa      660
gtttgtaacg tgcagtctgt tatgagttcc ctaatatatt cttatatgta gagcaataat      720
gcaaaagctg ttctatatgc aaacatgatg tctttattat tcaggagaat aaataactgt      780
tttgtgttgg ttggtggttt tcataatctt atttctgtac tggaactagt actttcttct      804
ctcattccgc caaaacaggg ctcagttatt catttgccaa gcttcgtgga ggaatgtagg      900
tgacatcaat gtgataaagt ctgtgttctg agttgtcaga tctcttgaag acaatatttt      960
tcatcactta ttgtttacta aagctacagc caaaaatatt ttttttcttt attctaaact     1020
gagccctata gcaagtgaag ggaccagatt tcctaattaa aggaagttag gtacttttct     1080
tgtatttttt accatatcac tgtaaagaag aggggaaacc cagccagcta ctttttttca     1140
tcacttttta ttcataactt cagatttgta aaactaattt ccaaaatata agctgttttc     1200
attagccagt tctataatat cttcctgtga tttatgtaga aaatgaacac accccttttc     1260
catttaagac cctgctactg tgtgaagaga tgatacttac aaggagtgtc attacctgtg     1320
agctgactga atgttggtag gtgctccatt acaatccagg aaagtctgtg ttactgatat     1380
ttgtgtggaa atctttattt cacttcaatt taaccattag atggtaaaat taagatgcta     1440
cttgttggta aaaattggtg gactggtttc aatgggtaaa tgtgttgtgg caaattaatg     1500
tgttggaata ttgctctttg tgaatttgtg cttaagtcaa tgaatgtgta gtatctcctt     1560
ctgacaagca ttccctattg ggattttaaa gctatgtgca cagaatatta gtctcttcta     1620
catgttttat ttttctattt ataattccct ttttgttgt tatattttat acaægaata     1680
gatctttttt ctaacacata tttgaactga ataacagact taaagaaagc ctttgttcac     1740
attgctattt actttgtgt ttgggggaaa atacgaggga ttgattttaa ataaaaaaca     1800
ttccatcttt catttaatat caatatcaaa agaagaagac aaacatctat ctttctcatc     1860
tatatttaag taccttttg taatgtagta tcaaagtttt ttaggtaatg caaaatttta     1920
caaatcattt gtggaatgaa tggtaaaact aatctgatga aatggaaaat tattctgcaa     1980
tattgtaatt catagtttga ctttttcataa gcaaataaat ccctaggatg taatcaggac     2040
ttcaaatgtg taattaaatt tttttaaaaa aaatctaaaa aaaaaaaaa aaaaaaaa       2098
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70

<210> 52
<211> 1675
<212> DNA
<213> Homo sapiens

<400> 52
cttaaagacg ccaggtagag acacacagaa cgtatgtatt aagaatatcc tctctgggct   60
ctgaaatttt aggagtgatt cttatccact ccaagttgta agtatttgta gaaatttgtg   120
caaacaaaca aaaactatca aatgaaaaga aaatgtactc aacctaactt atagttagca   180
gctggaattc tcaactcttc cctgccagca ctataccaca gtgtggaaga aattagtcaa   240
atgcttgttt tcctgcttct cttttcaact gttactgtgc tttgtttgaa agtagttttc   300
tctctcaaag ccgttgctta tatcgttaag aatgaaggtt tgtgtttaaaatttattgca   360
ttgcaaaggg tagtttcact gaagtcatgc accattaaat aagatgaaat atttgtattt   420
attgtcctac ttcctaagcc gtaacttctt ttcctctgtg aatttgcatt gagtcactca   480
tgctacacta catcgcttta gtatttgaga tggcatttat gtttcctctc gttatcatg   540
aaatggggtc agattccatc agattccacc tctgtcaggt ggactcttgt ctgccttcca   600
tgatgagatt ttttttctcc ttcccctttc tttaagagag ctgacagat ctaggtgtca   660
atcaattgga aaccagtctc tgattttttt tcattagtta ttttctatca ttagtttcac   720
tgtgtaaatt agatatcaac tgcacttctt taaaaaaaaa tactctccc tattacctcc   780
ttgaaagatt tacttctgta ggccttttc aataggctca tgactgcaga caaggaaaaa   840
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aaaaaagaaa cctgaatagc ctttaattct ttaataatac acttaaattt tatgtaaatc   960
ggttttcgcc acgtgtgttt gttcacattc taaatgactt aatgggattc tcacggtctg   1020
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ttcctttgat attgtactgc tgctgggagt gggctgtgga acctgccttc gggtaactgg   1140
gttcctcttg ggtagattgg agagtgggg gtgggcgtg gcaaattctc acacatgttt   1200
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ttttgcggta catatgtgtg ataactttaa tacccatgac agttaagtgc aattatttca   1500
tcactctaaa aatgctattt ttgtgtcagt tcctgcaggt gttttcatgt ctttgcaaag   1560
tgacacattt tgatgccttc ttgataaagt ggtagacatt ttgtagcttt ctagaaactt   1620
tgtattcata cggtatcaat gaaaaataaa gaaaatgaaa gtgtgggtca aaact   1675

<210> 53
<211> 1280
<212> DNA
<213> Homo sapiens

<400> 53
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tggcttccct tcctgaggac agactgaggt ggaacctttt ggctctgcca gcttctccat   180
gtgcagtcac agcactggtg gcaaggcata ggagagctgg gctacaaaga agcattcagt   240
gtctcctggg gcggcaggga ggtggggggtt gtaatgtga actcaccaaa ccccaggtgg   300
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ggctctgtct gatgactggc tctgtgatgt gagccaggtg acttctctaa ccctgagttg   420
cctcatctgt aaagataatt ccagtcttgg aggatttta tggasyaaaa aggacagagc   408
ggtcctgtgt atcccctgca aatggttaga cgttatccat ttacagcccc tgccaagcca   540
ccactagctt cttcagagaa cttttgaacc ctgcctccct aaagtagttc taaaacattt   600
ttcactgtgt tacccatcaa gggaaacaaa atgtttctac aaaccatagt aaataggatc   660
gtttttgtat tgtgtttcaa ggaggaaaag ctgaccagca agaagaacgt cggagacaaa   720
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agagccagaa aaccaagtat cccactcagt ctggcaagcc gcccctgctt gtgtctgccc   840
caagtaagag cgagtctgct ttgagctgtc tctccaagca gaagaagaag aagacaaaga   900

71

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agccgaagga gccacagccg gaacagccac agccaagtac aagtgcaaat taactggtca      960
agtgtgtcag tgactgcaca ttggtttctg ttctctggct atttgcaaaa cctctcccac     1020
ccttgtgttt cactccacca ccaaccccag gtaaaaaagt ctccctctct tccactcaca     1080
cccatagcgg gagagacctc atgcagattt gcattgtttt ggagtaagaa ttcaatgcag     1140
cagcttaatt tttctgtatt gcagtgttta taggcttctt gtgtgttaaa cttgatttca     1200
taaattaaaa acaatggtca gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaammmag     1260
ggsggcccgg gaaccaattt                                                1280


<210> 54
<211> 953
<212> DNA
<213> Homo sapiens


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aatgttacca ctttgtgttt caacgatatc gcctkgagca ctatactgtg acatcgaatt     180
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tgttcagagg atatcacggg cccttgatt tgtatccaga attttaccga attgctacag      300
acccaaccat ccacactgtc ccagaaggca gacctgtgaa tgtctgtgtg ggaaagagt      360
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cagagttcag aggtcagtta ccaaaacctt ttgcagaagg acctctggcc acccggattg     480
ttcctactga catgaatgac cagaatctag aagagccatc cagatatatt gatatcagta     540
aatgccatta tttagtggat ttggacacca tgagagaaac accccgggag ccaaaatatt     600
catccaataa agaagaatgg atcagcttgg cctatagacc attccttgat gcttctagat     660
cttcaaagct gctgcgggca ttctatgtcc ccttcctgtc agatcagtat acagtgtacg     720
taaactacac catcctcaaa ccccggaaag caaagcaaat caggaagaaaagtggaggtt     780
agcaacacac ctgtggcccc aaaggacaac catcttgtta actattgatt ccagtgacct     840
gactccctgc aagtcatcgc ctgtaacatt gtaataaag gtcttctgac atgaaaaaa      900
aamaaaaaag ggcggccgct ctagaggatc caagcttacg tacgcgtgca tgc           953


<210> 55
<211> 1027
<212> DNA
<213> Homo sapiens


<400> 55
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tttaactttt ttaaatagat ttatgtatgg tagtaaatga tagactagta tctacatgta     120
ttttatgtac tcttcacata cctttatttt ttttgatatt tctagtctat aggttcatc      180
tggttttca aattgttgca aatctccaaa aaattttcca atacatttat tgaaaaaaaa     240
tccatgtata agtggaccca cacagttcaa acccaagttg ttcaaggatt gactatttgt     300
ctatctaaac atacctaaac atagraaagg tacagtaaaa atacagtatt ataatcttat     360
gggatcacca ttgtctatgc aggctgacat tgaaatgtca ttatgtacag catgactgta     420
tagtgtttcc gagttctgtg aggctctcta gcaaactaat ggagctcaag aaggggttat     480
gggaaccca acttatagct agttggttag gacccttggt caccatctgg ggcttctgat      540
tgtcatctga agtgggagcc atcttgtggc actgagcytt caaccatgg tatctgatgc      600
tatctccggt agtgtaagaa gtgaattgaa ttagaggaca cccagctggt gtctgctgca     660
aaattgctta tttgcttaat gcgtggggaa ccccctcca cacacatctg gagtcagaaa      720
gggtgttgtg agattaaagt gggagaaact gaatttgttt attcctatat tcagaatggg     780
gtccttgara acatcatagt ggtaagcata gatgttctaa agtcagactg cctgggttca     840
tctctctgct ccaccacttc gagagttact ttagctcact gtgcttcagt ttcctattaa     900
attgggataa taataccatc tcatagagta acttaagaat taaatcagtt aatatacata     960
aagcacttgg aagtgtttga agcattaata aacactcaatagctaaaaaa aaaaaaaaag    1020
ggcggcc                                                            1027


<210> 56
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72

<211> 1368
<212> DNA
<213> Homo sapiens

<400> 56
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tgtcccggcg gcaatctctc caatcttatg tccctgctgg ttgacggcga catgaacctc    120
agcatcatca tgaccatctc ctccacgctt ctggccctcg tcttgatgcc cctgtgcctg    180
tggatctaca gctgggcttg gatcaacacc cctatcgtgc agttactacc cctagggacc    240
gtgaccctga ctctctgcag cactctcata cctatcgggt gggcgtctt cattcgctac     300
aaatacagcc gggtggctga ctacattgtg aaggtttccc tgtggtctct gctagtgact    360
ctggtggtcc ttttcataat gaccggcact atgttaggac ctgaactgct ggcaagtatc    420
cctgcagctg tttatgtgat agcaattttt atgcctttgg caggctacgc ttcaggttat    480
ggtttagcta ctctcttcca tcttccaccc aactgcaaga ggactgtatg tctggaaaca    540
ggtagtcaga atgtgcagct ctgtacagcc attctaaaac tggcctttcc accgcaattc    600
ataggaagca tgtacatgtt tcctttgctg tatgcacttt ccagtctgc agaagcgggg    660
attttttgttt taatctataa aatgtatgga agatgaatg ttgcacaagc gagatcctct    720
agatgaagat gaagatacag atatttctta taaaaaacta aaagaagagg aaatggcaga    780
cacttcctat ggcacagtga aagcagaaaa tataataatg atggaaaccg ctcagacttc    840
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gtttttagtt tttaccatca ccaatttcta tgactgttgc aaatacagaa tctattagaa   1140
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aaagcataat tgagtttaat gtaattgttg taaaaaaaaa agtgtgcttg ctctacttaa   1260
aattcctcac aatgttgaat tttgacctgt attcagaaga attccaaaac aggtcagtta   1320
aataaggaaa tatagtattt gtcaaaccag tatcagagaa aagttaca              1368
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<210> 57
<211> 402
<212> DNA
<213> Homo sapiens

<400> 57
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gattgtagca aaagttctga gaggagctga gcctgttgt ggcccattaa agaacagggt    120
cctcaggccc tgcccgcttc ctgtccactg cccccctcccc atccccagcc cagccgaggg    180
aatcccgtgg gttgcttacc tactataag gtggtttata agctgctgtc ctggccactg     240
cattcaaatt ccaatgtgta cttcatagtg taaaaattta tattattgtg aggttttttg    300
tctttttttt tttttttttt ttttggtata ttgctgtatc tactttaact tccagaaata    360
aacgttatat aggaacaaaa aaaaaaaaaa aaaaaaaaaa aa                        402
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<210> 58
<211> 864
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)..(28)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (706)..(706)
<223> n equals a,t,g, or c

73

<220>
<221> misc_feature
<222> (745)..(745)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (748)..(748)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (757)..(757)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (765)..(765)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (772)..(772)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (781)..(781)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (813)..(813)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (840)..(840)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (842)..(842)
<223> n equals a,t,g, or c

<400> 58
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cgcagcagcc accgccgcgt ccctctctcc acgaggctgc cggcttagga cccccagctc   120
cgacatgtcg ccctctggtc gcctgtgtct tctcaccatc gttggcctga ttctccccac   180
cagaggacag acgttgaaag ataccacgtc cagttcttca gcagactcaa ctatcatgga   240
cattcaggtc ccgacacgag ccccagatgc agtctacaca gaactccagc ccacctctcc   300
aaccccaacc tggcctgctg atgaaacacc acaaccccag acccagaccc agcaactgga   360
aggaacggat gggcctctag tgacagatcc agagacacac aagagcacca aagcagctca   420
tcccactgat gacaccacga cgctctctga gagaccatcc ccaagcacag acgtccagac   480
agacccccag accctcaagc catctggttt tcatgaggat gaccccttct tctatgatga   540
acacaccctc cggaaacggg ggctgttggt cgcagctgtg ctgttcatca caggcatat   600

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catcctcacc agtggcaagt gcaggcagct gtcccggtat gccggaatca ttggaggtga      660
gtccatcaga aacaggagct gacaacctgc tgggcacccc gaagancaaa gcccctggc       720
agcttaccgg gcccaagcct ctggnatncc cttgaanagc ctggncagag angggaagac      780
nccgatgatg aacttggacc caggggttgcc ggncccaggg ctcctacttc cccaaacctn     840
gnccggccct tgaaggttac ctgg                                            864


<210> 59
<211> 786
<212> DNA
<213> Homo sapiens

<400> 59
ggcacagcgg cacgagaaga ctttggtgtt taagagatta atgtgttagc cagaacaat       60
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aaattacttt cttagttttc ttcattaaaa actaagaaaa tgctttgttt attatgaatt      180
gctatttctc ttgattatta ttcttggaga aagtctatca gacgtaattc ttctgatttg      240
cttctaggct agaggaaaat gtgaaagatg acaaatgaaa atttcaaagg ttgtcagtag      300
tatgacttct tttatcgttt gtcattatca caaatatatc aacataggac ttttaaaaga      360
tattttgtac atattgggcc ttagtaggat tttgcatgaa tttttttttt cttttatgcc      420
cagagagaaa gagcaaagaa ataaccaagg gtgatgtact cgtattgaag gttaccaaa       480
taaggactgc ttttattatg aactatagtc tatattctaa gtaaatcaat ttttctatta      540
tgtgtttttt gttcctgcag gcaagatctc tgaactttat gcagagggtt ctttttaaaaa     600
aacaaagttg aatttttta tttcttggaa tatttttttt cattgatttc tcccaagtag        660
agcagattca aatctccttt gtaccctatg tcttttttgt tttgctatta gctcagtatt       720
ccgtttctac attttccttt cctagaacca gtcaataaat gacaaaaaaa aaaaaaaaa        780
actcga                                                                786


<210> 60
<211> 1175
<212> DNA
<213> Homo sapiens

<400> 60
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acctgggaag atggccggcc cgtggacctt cacccttctc tgtggtttgc tggcagccac      120
cttgatccaa gccaccctca gtcccactgc agttctcatc ctcggcccaa aagtcatcaa      180
agaaaagctg acacaggagc tgaaggacca caacgccacc agcatcctgc agcagctgcc      240
gctgctcagt gccatgcggg aaaaagccagc cggaggcatc cctgtgctgg gcagcctggt      300
gaacaccgtc ctgaagcaca tcatctggct gaaggtcatc acagctaaca tcctccagct      360
gcaggtgaag ccctcggcca atgaccagga gctgctagtc aagatcccc tggacatggt      420
ggctggattc aacacgcccc tggtcaagac catcgtggag ttccacatga cgactgaggc      480
ccaagccacc atccgcatgg acaccagtgc aagtggcccc acccgcctgg tcctcagtga      540
ctgtgccacc agccatggga gcctgcgcat ccaactgctg cataagctct ccttcctggt      600
gaacgcctta gctaagcagg tcatgaacct cctagtgcca tccatgccaa ggtggcccaa      660
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aataacatca gctctgatcg gatccagctg atgaactctg ggatggctg gttccaacct       840
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ggcaaattaa gatctggggt cccagtgtca ttggtgaagg ccttgggatt cgaggcagct      960
gagtcctcac tgaccaagga tgcccttgtg cttactccag cctccttgtg gaaacccagc     1020
tctcctgtct cccagtgaag acttggatgg cagccatcag ggaaggctgg gtcccagctg     1080
ggagtatggg tgtgagctct atagaccatc cctytctgca atcaataaac acttgcctgt     1140
gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                                1175


<210> 61
<211> 537
<212> DNA
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75

<213> Homo sapiens

<400> 61
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cgtttcgctg cggagggaag tccactctcg gggagagatg ctgatgccgg tccacttcct   120
gctgctcctg ctgctgctcc tggggggccc caggacaggc ctcccccaca agttctacaa   180
agccaagccc atcttcagct gcctcaacac cgccctgtct gaggctgaga agggccagtg   240
ggaggatgca tccctgctga gcaagaggag cttccactac ctgcgcagca gagacgcctc   300
ttcgggagag gaggaggagg gcaaagagaa aaagactttc cccatctctg gggccagggg   360
tggagccaga ggcacccggt acagatacgt gtcccaagca cagcccaggg gaaaagccacg   420
ccaggacacg gccaagagtc cccaccgcac caagttcacc ctgtccctcg acgtccccac   480
caacatcatg aacctcctct tcaacatcgc caaggccaag aacctgcgtg cccaggc       537
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<210> 62
<211> 843
<212> DNA
<213> Homo sapiens

<400> 62
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ggcagctgtc caccgatccc ggccaccgcc cccggccacc cccacccccgc gagcccatgg    60
aggctccggg accccgcgcc ttgcggactg cgctctgtgg cggctgttgc tgcctcctcc   120
tatgtgccca gctggctgtg gctggtaaag gagctcgagg ctttgggagg ggagccctga   180
tccgcctgaa tatctggccg gcggtccaag gggcctgcaa aagctggag gtctgtgagc    240
actgcgtgga gggagacaga gcgcgcaatc tctccagctg catgtgggag cagtgccggc   300
cagaggagcc aggacactgt gtggcccaat ctgaggtggt caaggaaggt tgctccatct   360
acaaccgctc agaggcatgt ccagctgctc accaccaccc cacctatgaa ccgaagacag   420
tcacaacagg gagcccccca gtccctgagg cccacagccc tggatttgac ggggccagct   480
ttatcggagg tgtcgtgctg gtgttgagcc tacaggcggt ggctttcttt gtgctgcact   540
tcctcaaggc caaggacagc acctaccaga cgctaatctg acccctttgg gcctggactc   600
catcctgagg ggaaaggagg atgcagaggg tggcctctgg gcacccttgt gggtaagcgg   660
ggggcggggg cgggaaaaac tctggccgcc agttttttggc tcctgcgggc accaagcagg   720
ccaagtgttt aatgcctgac atctcctcct gtcctgggcc tggaacctgc agctgagaaa   780
atccctcaac cacctcgtct cctccatcgc ccctgctggg cccccccagcc tgacagtggg   840
ttg                                                                  843
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<210> 63
<211> 849
<212> DNA
<213> Homo sapiens

<400> 63
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gaattcggca cgaggtataa tgccattctc ttcctctgtg aagtgcctgt tcggggtgtt    60
gctacgtttt tgttttgttg tgttttctgt tgtagtgtt acattttttct tgtcgattcc   120
taagaggact ttagggtact gagtcaccca tggtcatgtg ttgcagagaa gtgtcacaga   180
gtgaaaactg tcttttcctt gatactacct ttagattcat atttgggaag accttcacta   240
atcatgacta cataagtatt cactttttact ttcttaaggc cttttttgttt tcattctttt   300
atagtaatgt ctaagccatc tggaattagt ttgttgatta tgcaagaaag ggatcgaagt   360
gctttttctg agtcattatc cacatgccga aacatttatt gaatagccct ttccttattg   420
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agtcagaaga acattctttt gattatkgta gcttacatw aataatacat ttkggccggg   540
tgcggtggct cacgtatgta atcctagcat tttgggagac tgaggcaggc ggaacacctg   600
aggtcagggg ttcaagacca gactggccaa catggcaaaa ccccgtctct acaaaaaaaa   660
aaaaaaaaaa aattagctgg gcatggtggt gcctgcctga atcccagct actttgggag   720
gctgaggcag gagaacctct tgagcctggg aggtagaggc tgcagtgagc cgagcttgca   780
ccactgcact ccaacttggg taacagagtg agactccatc tcaaaaaaaa aaaaaaaaa   840
aaaactcga                                                           849
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76

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<210> 64
<211> 2434
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (12)..(12)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (27)..(27)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (73)..(73)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (75)..(75)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (103)..(103)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (130)..(130)
<223> n equals a,t,g, or c

<400> 64
ctgggggtan tncaagaacc ctctgtngga cttagatgtc aagctctttc ctttgggcag      60
cgtgtttcct ttntncgagt agtgtgctgt gtaaactaaa ttngccggtt cgctttccat     120
ttcctgacan ttgagatgga atgccttgac cattggtgct ctgacagag agtcatggag     180
tcattgccat ttcctggttg ccctttttgga atgtgatcct gttagtagag gttttctagc     240
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ggcagctttt ctgctttttc ccttcctctg tggtgacaac ggaggaaata tccaacagaa     660
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gaggaaggtt ttcatatatg atctatcttt ggattaaaaa gaacatttat gaaatcaagc     780
cttctaacac tagttataat tgagaagcaa cagtaactcc gtggacagca atcaagctta     840
aaattgtaaa taaatatggg gataattcag ttgttgcaaa aaaagggcag aattcagtag     900
aataaagtcc ttttctctta caggtattaa atgaggacag agaacctcag gtgttcttat     960
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gctagtgctt gctgagtgca tactaagaaa gcaattcaa atagatgtat acatctagag   1020
agagtggtat tagagattca gtgtatgtat ttatttacat gagaggaaac tggaatataa   1080
tcccataaat tattggaata taatcccata aattatcacc ttttatgact ggaaaatatt   1140
tgccaatgaa gaaatggtct gtaggtattt gtcttaagat ttttggctgt ttaataaaaa   1200
tgtaacttta acggtttctt atagttgcct ttataaagtg tattgtctaa aatatttttg   1260
tatcatgtgc ctttgaaatt tgacagctga tttgggtgtt ggatttctgc ccagccattt   1320
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ggatggaaac agtgtggcct taggagtcaa atagtctctg catggtgggg aggatcatga   1560
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gcactatgtc taggaggcaa tatccttttа aacagtgctt tggctaagat agatacttgt   1920
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gaacataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   2400
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa                                2434


<210> 65
<211> 872
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (844)..(844)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (858)..(858)
<223> n equals a,t,g, or c

<400> 65
ggggaagttc ttcactgct tgcatttgac tccagatccc tccatcctcc cagagccttg     60
gcctcaaaaa tgctgattct agcatcatgg aaatgctgtc ctcaaagtgg tctaaacggg    120
ttgctgcttc acttgctcac ttaatctccc ttttcatagg gctgttgttt ttacttctgg    180
gaagttctgt ttaccctgga acagaaactc tcttccctaa aagttgatt tattgaccca     240
tggaggccag agacacttag gcatattttc cctccagact agaagcttct gaggaggacc    300
tcctgagtct gcaccctggc tccctgctgt gctgagggcc cccgtgttaa cctcacgttg    360
tgcctcctct gattcagagg gcccagtgtg gttctgtcag ccaggcagtg gccccagctc    420
tacagaaatg agttgtcatt gcatcctagg gccagggtct tcgtgcttgt gtgtgttacg    480
tggaagtatg tggacaccaa gtgttcctgg atggccacag cctgcgaagg aaactggggc    540
cagcagctgc tctgtgtttt cagccaacaa tggctcctgc ccactgccgc tgcataacca    600
ccagaggcag gcttctcttg acacaggcct gtcgttggag cagtgcctg gcgagtccta    660
tttctattcc cctgtgggtt agggacaggc agctgtacct tcagtgtgtt gctggggcag    720
gagaatcgct tgaaccggga ggcggaggtt gcagtgagcc aaaattgcac cactgcactg    780
cagtctgcag gacagagaga ggctmatct caaaaaaaaa aaaaaaaaa actcgagggg     840
gggnccggga cccaattngc catataggaa aa                                  872
```

<210> 66
<211> 1932
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)..(2)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1022)..(1022)
<223> n equals a,t,g, or c

<400> 66
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gggaaatagg cccccggggg cggtggcggc ggcggggcca tggcgcggag accccgggcg     120
ccggccgcct ccggggagga gttctccttc gtcagcccgc tggtgaaata cctgctcttc     180
ttcttcaaca tgctcttctg ggtgatttcc atggtgatgg tggctgtggg tgtctacgct     240
cggctaatga agcatgcaga agcagcccta gcctgcctgg cagtggaccc tgccatcctg     300
ctgatcgtgg tgggtgtcct catgttcctg ctcaccttct gtggctgcat tgggtccctc     360
cgcgagaaca tctgcctcct gcagacgttc tcccttgcc tcaccgctgt gttcctgctg     420
cagctggccg ctgggatcct gggcttcgtc ttctcagaca aggctcgagg gaaagtgagt     480
gagatcatca acaatgccat tgtgcactac cgagatgact tggatctgca gaacctcatt     540
gattttggcc agaaaaagtt tagctgctgt ggagggattt cctacaagga ctggtctcag     600
aacatgtatt tcaactgctc agaagacaac cccagtcgag agcgctgctc tgtgccttac     660
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caggcctttg actacttgga agctagcaaa gtcatctaca ccaatggctg tattgacaag     780
ttggtcaact ggatacacag caacctattc ttacttggtg gtgtggctct aggcctggcc     840
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atcaagctac agctctacaa ccagcagcac cgggctgacc catggtactg agaatccatc     960
ctgcacctcc tcaccatgga aactggcaag cctcataaac gaacagcagt gggtgctgaa    1020
ancagcacca aatggagatt tggattccag ccccccagtg acagcccagt gggaagaagc    1080
aaactccaga tgggcagaag gcagggtgca caggtggctc cagtctcagg aggatgcgcc    1140
tcctctcccc catcccagcc ctcagcattg tgccagagtg atacccttaa gtgtttgggt    1200
ttatgttttc agttttgttt gggaacagc agttgcacag agagttgggg gtactgctgc    1260
tgccttttca ccgaggcact gccaccacca gctctascag ggatgctcct gagcttggcg    1320
gacatactta gatcctaacg tgccagtgag acctggctgt ggagagtagc actggcagcc    1380
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tgaggagaga gcctggggt cggctgggga cagccgtatg tgctaggtag gagtggaggg    1500
agatatgttt accaaatgcc tgtcctgcca tcctcccagg tagtcagagt gagctacatc    1560
ctgccccgcc ttcatttcca tggaaacatg gcagctagga cacgggtac aacagcagcc    1620
aaattcttcc ccacctccc tacttcgaaa aaaagtttgg aaccctggtc cctatactct    1680
gcagtcagaa gtgggactga gccatacatg cccttgaatt cctccctgtc tggccctccc    1740
tctccagcaa gcagggtttt ctttaacttg gcagtgtgca gaggagaagt ggtaacaccc    1800
ccaccccatt cccctgcatc ggagctcagt attcctacag ggtaagaggtaggaatcttg    1860
ctgggacgag gggagccaga agtggcaata aaagcgtgtt gacctggaaa aaaaaaaaa    1920
aagggcggcc gc                                                       1932
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<210> 67
<211> 1853
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1840)..(1840)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1851)..(1851)
<223> n equals a,t,g, or c

<400> 67
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ctgcaggaat tcggcacgag cacctataaa gaatctcaac ccacttccca ctcaaaagca     60
ctgtgtattt ctcatggcct gcctgggagc ccccatctcc gcctgctgt gctggctact    120
tctggcactt atagcccttg agatagtacc gccagcagct ccctgtgaag tgctaacacc    180
ccttcaaagc agcaccaacc caattgtgaa caagctagga gtaaaagacg taaatgaatt    240
ggtcacccca atgcagggga tacagacttg ttttaatata aaaagaagt ggccttaacc    300
gtgcagggct tgcaggcctt tgtaggcatg ggagcatgct gtgatccctg gttctgtgct    360
aaacactcaa aagggctctc tgactcaagt ggaggtgata aaccttttca atagtaacag    420
gagagagtgt gatatcaaag tgccmgaasy cctcacggac caacatttag cacagacatt    480
caaactgctg aaagawccaa wcagaactca actgaaaaa acagaccttt taagaaaagc    540
aatagatctt aatttggtgg caagatccct ggtttacctt ttgaagtcaa aatgttcaat    600
acatcacccg agcttgactt ttgagcactt ggcaagattg tttttgcca cttgacacaa    660
gtatgatgtc cagctatgca aaatgactgt ttgatctgcc ttttcagtgt atttgtgtgg    720
cgatgtctgt aaaatgccag aagcctctta tgttattgct gctgctgcta ccagccagca    780
actgcagagg ccatgctgag gtgcctcctt gccaccagcc gttgggaaat gcctaccatg    840
ctgccccgga tgcacaagct caaaacgctg cagaagttac acaactgctc ccataatctg    900
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tgcctctgtt cctgagacta aacagtatac atactaacta cattgacaaa gaaatcctat   1020
ctgataatgt agcccgctga cgaattttga agcctcggtt accctaacca atatgtagct   1080
tttaatttgc atcaaaactt ttacaaagat gttttgctat tgtttctata tacttcaaga   1140
atgttcattt ttacaaataa gttgaacaag acagcctaag ttagatgcac cgaagtacta   1200
gaaatatcgc tagcctctgt tctccagttt agctttcaaa accaaatgag ccatgtataa   1260
aggagttgag aaacttaatt tttaaatgtt tcatttgcag agttttatat ccattaagtg   1320
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ccttatggtg ctaaaacctc aaagctgagg agggctgcag gacccttagc agattcagtg   1440
tgtcacccct gtcctgtgtt cacgccaagg cttcctaaat gaaagacatc ggttacctgc   1500
ttatgggaag actcttcatg ctgatcggat cttgcattga aataaccatg tggaagaca   1560
atgaatcgat taatgatgac atgtacaacc atatttaaag agcaatagtg tccgtgtgtc   1620
atgaaaaact tatttgtaaa cgtttatatg gtatgatttt gattttatgt atgttcataa   1680
atcctgcact gtatgatata tgtgagttaa aacattggtg catgaattta ttttcaaagt   1740
ataaaacaca tcacttaaac attttatgtg tcaaataaaa tttgattatg taaaaaaaaa   1800
aaaaaaaaac tcgaggggggg gcccggrccc aattcgccan atggagatcc naa          1853
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<210> 68
<211> 1061
<212> DNA
<213> Homo sapiens

<400> 68
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ggcacgagga ttctaggaca gggatggggg tgcagcactg atccaggacc cagaatgag     60
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ctatggtgac cgaggacttg tgccgagcac cagacgggaa gaaagggggag gcaggaagac    180
ctggcagacg ggggcggcca ggcctcaagg gggagcaagg ggagccgggg gcccctggca    240
tccggacagg catccaaggc cttaaaggag accaggggga acctgggccc tctggaaacc    300
ccggcaaggt gggctaccca gggcccagcg gcccccctcgg agcccgtggc atcccgggaa    360
ttaaaggcac caagggcagc ccaggaaaca tcaaggacca gccgaggcca gccttctccg    420
ccattcggcg gaacccccca atggggggca acgtggtcat cttcgacacg gcatcacca    480
accaggaaga accgtaccag aaccactccg gccgattcgt ctgcactgta cccggctact    540
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actacttcac cttccaggtg ctgtcccagt gggaaatctg cctgtccatc gtctcctcct    600
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aggtggtgtc aggggcatg gtgcttcagc tgcagcaggg tgaccaggtc tgggttgaaa    720
aagaccccaa aaagggtcac atttaccagg gctctgaggc cgacagcgtc ttcagcggct    780
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cttccatgct ccgcctgtaa aatgggggcg ctattgcttc agctgtgaa gggaggggc    900
tggctctgag agccccagga ctggctgccc cgtgacacat gctctaagaa gctcgtttct    960
tagacctctt cctggaataa acatctgtgt ctgtgtctgc tgaaaaaaaa aaaaaaaaa   1020
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a                       1061


<210> 69
<211> 920
<212> DNA
<213> Homo sapiens


<400> 69
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agtatcactc tgtggggttt cacagcaccc tggatcctgc cttccagccc ctgccaaggt    120
aaacagtgct gcctgcctcc tgtggggaat gcaggatggg gcaatgcct ggcagcaggg    180
tcttgcctca gctgatgcaa ctgtggctgc tcctgtgtgc acagatcatg tgcctggaag    240
ccttcctgca gcagggcagt gtcagaaagt ggaagagtgg tgtgagcagc ttccccgggg    300
aaagcctggc tgagcaactg accttgagca agcactgcag atggcccttg ttcctgccgg    360
gctcctccag ctggagctc tcagcccctg gtaaattctg gcagtgaaag acacattagc    420
acctcccccт acaatgaggc acctatctag acaacttggc tgtccgggct taacctgcgt    480
ggcagggaag gacgcctgcc cagccttagc ctctacgcaa tggtggaggc agggaggggag    540
agaaccacac agctcccctc atttcccagc agcccccatg ggcctagtc aacagggtgt    600
ggtcacaggc taaatgagca aagatgtgag ctaatatact ggtaggtgtc atggggggctt    660
tcagagctgg gtaaggaggg aaagagatgg agatactggt tccccactcc ttaacgtgcc    720
acctgccttc cctgtccttt accctccctc attctgctgg acctgaggaa aatgcaaggg    780
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caaaaaaaaa aaaaaaaaaa                                                920


<210> 70
<211> 601
<212> DNA
<213> Homo sapiens


<400> 70
gctgccagga attccggcac ggggaacagt gtaatattga agcaaatgct gtataacaac     60
cacctggaag cccctcatgt atctcttttt gaaaacactc ctctctttct ccactctaat    120
gatgaccacc gccttgtctt ttatggtaat cactgttctt tgggtttтat tactgcattt    180
attggctaat atatgcatcc ctagaaaatg tagttttgcc tgcttttata taaatggaat    240
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actgcagttt atttactgtt gacatatgtt tcagttgtt ttaactacta ggaaatgcta    420
ctctgtacat tcttgtatat gtaccttggt gcacatatgt atgttttтct agagtatata    480
cagtggcatg ggattgctga attaaaaggt ttgtatatct tatactagaa gataataaaa    540
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a                                                                    601


<210> 71
<211> 1356
<212> DNA
<213> Homo sapiens


<400> 71
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaa aaaaaa                                1356


<210> 72
<211> 1411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1395)..(1395)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1397)..(1397)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1401)..(1401)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1408)..(1408)
<223> n equals a,t,g, or c

<400> 72
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tgtaactggg gaaaatcaag atggtacctc tctgcattat cccgccagac actgtatttt    180
atgcattcat gtctaggata cagtgtgaaa attaaaaagt ttagagggca gatgcaattg    240
tggcaagtga cctgccaata aagcaggtgc agctatgaa gctggcatag gtatatcctt    300
aatggtgctt tctccctggg cttgtctttt tgttgttttt ttcccctata ttcagagctc    360
cttgagaagt gataaacacc tccagctttc taacatcctc cccacaccat ctcaccatat    420
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82

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ccatctccca gcatccatct gcattcagct aagggcggga aactgaccta gtgcctgtgt   480
tgcagaccat ttctgaggtc tccaccatcc aaggaggcac agccgtcatt actgtcctcc   540
atgccttcag cagcccccct cacagctaag gtacatacca ccccttctgc cgcgcctcca   600
cccctggcac caaggtcttc tgctgcttat gtctaaaggg atcacctata tttaactgcc   660
tcagtgacct aacctctttc ttctcatgtg cagatgtta agatgaagga ggaatacmac   720
acatactcaa gcctcagcct gtttagttgt tttcactggg gctcgctttt ctgggacggt   780
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acttatttac ttttgaatgt tcttctgtat ctttaaacct tttattaaat aaggtttaa      1320
aaattcaaaa aaaaaaaaa aaaaaaaag ggsggccsct ytaraggatc caascttgcg        1380
tacgcgtgca acganancag ngtcgagngg t                                    1411


<210> 73
<211> 2229
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2227)..(2227)
<223> n equals a,t,g, or c

<400> 73
ggcagtatat aaaatttgtg gggcttacag cctcgcccac ctgcttcact tctgcagccc   60
acagcatcat attctcgaaa agataaagac caaaggaagc aacaggcaat gtggcgagtg   120
ccctctgatt taaagatgct aaaaagactc aaaactcaaa tggccgaagt tcgtgtatg    180
aaaactgatg taaagaatac actttcagaa ataaaaagca gcagtgctgc ttctggagac   240
atgcagacaa gccttttttc tgctgaccag gcagctctgg ctgcatgtgg aactgaaaac   300
tctggcagat tgcaggattt gggaatggaa ctcctggcaa agtcatcagt tgccaattgt   360
tacatacgaa actccacaaa taagaagagt aattcgccca agccagctcg atccagtgta   420
gcaggtagtc tatcacttcg aagagcagtg gaccctggag aaaatagtcg ttcaaaggga   480
gactgtcaga ctctgtctga aggctcccca ggaagctctc agtctgggag caggcacagt   540
tctccccgag ccttgataca tggcagtatc ggtgatattc tgccaaaac tgaagaccgg    600
cagtgtaaag ctttggattc agatgctgtt gtggttgcag ttttcagtgg cttgcctgcg   660
gttgagaaaa ggaggaaaat ggtcaccttg ggggctaatg ctaaaggagg tcatctggaa   720
ggactgcaga tgactgattt ggaaaataat tctgaaactg gagagttaca gcctgtacta   780
cctgaaggag cttcagctgc ccctgaagaa ggaatgagta gcgacagtga cattgaatgt   840
gacactgaga atgaggagca ggaagagcat accagtgtgg gcgggtttca cgactccttc   900
atggtcatga cacagccccc ggatgaagat acacattcca gttttcctga tggtgaacaa   960
ataggccctg aagatctcag cttcaataca gatgaaaata gtgaaggta attgccaaat    1020
caagagaact gacttgcaag ctaccttgac cctgaatttt gctgtagttg gtgctcaaat   1080
ttgtcatcag tcagataatc agatttggtc ttatttcttc attatctcga cctgaaatag   1140
taatttggaa actgttggaa ggtggcacag tttagtctaa gacagcagta gtacatggga   1200
aaaacagtat gggaagagtt ctttgtaatg taaggaaata acaatgtagt tctctattaa   1260
tttagcaaat ttgtacattc acaaaaggca gtttgtctac tacagcagaa ggctggttaa   1320
ctgccagaaa atgtacctcc aggccctgca tgccgtcagt aacccgcccg gcattggtgc   1380
tctactgtct ttggctagag cttagttgtg tttaaatat catctttata tttggggttt    1440
taattacagt tccattagtg cctgtagatt agtgaacaga aaattgcttt ggaagagatt   1500
ctgccctgta gacactatgt gaataactga agtaacacta gactgaatct ccttttttgga  1560
gtatgtatct tctctcactt gttcaagtac aggcacactg ttcaaccgca tggtatcttt   1620
ctgttgtgtg acttctacaa atgtaatttt aaatgaaatt aagttaacat ggattcatta   1680
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83

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cgttcctggc cctgtagaca cgtgtaagat tatttaaaat tctttcattt ttttctgcct    1740
cttactatac gactgtagtg caacaaatat tttaaagccc ccttttcttc tttattttca    1800
ttagttgtac attgatttca gtgtcaacac attaaaagat tcattcatgt tgcacagtgg    1860
cttacatgaa cgtgaaactg tgatataagg ttttctttca tactcataat tagcccaaaa    1920
cagttgccaa actttgccat tgtgctcctg catttgtgtt tgagctgcta tatatttgtg    1980
gaaattacac tgaaagttga ctaagagact attgaaaaag catgaataat taaatataca    2040
tgtgagagac atctcatctg ctgtatttta cttagtgaat attgttcact cttccgtgtc    2100
tgatgtcttg ctgaatgctg tgactcatag tttacttttg ttcaaaatag tttgcacttt    2160
ttgttaataa aatcaacttg agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    2220
aaaaaancg                                                            2229


<210> 74
<211> 1554
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (695)..(695)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (874)..(874)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1190)..(1190)
<223> n equals a,t,g, or c

<400> 74
gctttaatag tgtacactta cacatctgga aggaagagag ttccatatgg cagggatgat      60
tgggacagga gggatctttt gataactttg tgtgagcatg aaaatcgaat ggggaaggga     120
gagctgtgaa aaaaaatgt tatctctttt tttttgcttc tggaaaccca gcttttttggt     180
cagccgtctt gtgatttggc tgggcctggt ttgtgggggt cgctctctga gttgggtagc     240
tcttggagaa gattatctgg gaactcccat ccttatccca aacatacacc aaacctgccc     300
ccatccacca ttatgggaat tagtaccaga gcatccttgc agattagtc tcattttctc       360
tctttgtgag cacacacaca tcaggtagag ttccagaaac ccagctttag gacactgttc     420
acatatcaca ggaggagcaa ggacatgaat acaagagagc tctttcctga ccagcagtgg     480
gargtggttg tactatctat ttawttgttt attwatttat ttatttttttg agatggartc     540
tccttctgtc acccaggctg gagtgcagtg gcatgatctc ggctcactgc aatctctgcc     600
tcctgggttc aagcagtcct cctgcctcag cccccaagt agctgsgatt acaggctgca      660
ccaccatgcc ccgctaattt ttgtattttt agtanagatg gggtttcacc atgttggcca     720
ggctggtctg taactcctga mctcaggtga tccacctgcc tagcctccc aaggtgctgg       780
gattacaggt gtgagccacc gtgcccggsc tggttccact atttattaaa atgtatatat     840
gtgttttyca ctttttttggt aggcatttta ttgntaataa tttggaaatt aaaaaaattt     900
ctccacaagc ttattttttg tggagacaag gtctccctgt gttgcctagg ctggtcttga     960
attcctgggc taagtgattg gtctgccttg gcctctcaaa gtgctgggga ttacaggcat    1020
aagtcaccat gccctgtttg scagcaagkt ttawackgct cttttttggta gggawwtkct    1080
maggtwcagt gatagagaac atgkagttgt ggtgggawac agtggctyat gactgtatcc    1140
gcactttggg aggctgaggc aggaggattg cttgaggtg agagttgagn acaggcctgg     1200
gcaacatagc aagacacctt ctctaaaatg aaaaaaatta gctggatgtg gtgtcatgta    1260
cctgtagtcc cagttgcttg ggaggctgag gcaggaggat cacttgagcc tgggtgttca    1320
agataggcct ggtcaacaca gcaagacccc ttctctaaaa atgaaaataa aaaaattagc    1380
tggttgtggt ggcatgtacc tgtagtccca gttacttggg aggctgagac aggaggattg    1440
cttgagccag gggtttgagg ctgcagtgag ctatgactgc tcccctgcac cccaggctgg    1500
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84

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gtgacagagt gagacccagt ctctaaaata aaaaaaaaaa aaaaaaact cgta            1554

<210> 75
<211> 2083
<212> DNA
<213> Homo sapiens

<400> 75
ggcacgagcg acctttgtga gcgagctgga ggcggccaag aagaacttaa gcgaggccct       60
gggggacaac gtgaaacaat actgggctaa cctaaagctg tggttcaagc agaagatcag      120
caaagaggag tttgaccttg aagctcatag acttctcaca caggataatg tccattctca      180
caatgatttc ctcctggcca ttctcacgcg ttgtcagatt ttggtttcta caccagatgg      240
tgctggatct ttgccttggc caggggggttc cgcagcaaaa cctggaaaac ccaagggaaa      300
gaaaaagctt tcttctgttc gtcagaaatt tgatcataga ttccagcctc aaaatcctct      360
ctcaggagcc cagcaatttg tggcaaagga tcccaagat gatgacgact tgaaactttg       420
ttcccacaca atgatgcttc ccactcgagg ccagcttgaa gggagaatga tagtgactgc      480
ttatgagcat gggctggaca atgtcaccga ggaggctgtt tcagctgttg tctatgctgt      540
ggagaatcac cttaaagata tactgacgtc agttgtgtca agaaggaaag cttatcggtt      600
acgagatggt cattttaaat atgcctttgg cagtaacgtg accccgcagc catacctgaa      660
gaatagtgta gtagcttaca caacttaat agaaagccct ccagctttta ctgctccctg       720
tgctggtcag aatccagctt ctcacccacc ccctgatgat gctgagcagc aggctgcact      780
cctgctggca tgctccggag acactctacc tgcatctttg cctcggtga acatgtacga       840
tcttttttgaa gctttgcagg tgcacaggga agtcatccct acacatactg tctatgctct      900
taacattgaa aggatcatca cgaaactctg gcatccaaat catgaagagc tgcagcaaga      960
caaagttcac cgccagcgct tggcagccaa ggagggggctt ttgctgtgct aaattagagt    1020
ttgagggtgt gggaccctca ccaaattcat tgattactga aaattgaatg ttttttgggt    1080
ccacatttca aggctgaagt gtgtagtgta tatataacct ttcctatgga aatgtgacat    1140
tgagtacatt ttgtgttgct gttgtgaagc cattaatata aatctttggt aatgacccat    1200
atctctatat gtatgtgttc ccagttgtgg gagcaggcac taatgaaatc ctgtgcctgg    1260
aatggagata tttaggtacc tgaggcttag tgtcctgtgg tctgcatgta agatagatga    1320
catcctagaa caaagaagct gttttaactt aatcccctg atcagcagga tatctgtgtg    1380
ttcagtgaca tcatacattc tgtatctaga agtctaaaat ttctgccttt cctaaaga     1440
atgtgttctt gcattttggt tgaaataacc tacacagtgt taaaaatcag atacctcctt    1500
tagtgaccag ttcaaatttt aatagcgata ggtagcccct gagaaattta tcactataac    1560
tccacaggaa atatgacttg gaagtgctct gtgtactaaa caaaataaag cccctctttg    1620
catttaaaac caaagtcaaa acaaaactct tgtaatgcaa ttaattaact tcatgtcttc    1680
ccatgactca agttttgtta aatatgccca aaaactttga ttggcagttt cttcggttaa    1740
ttattcctat agaatgtatt ttaagaaatc tatacaaatt ggatatatgc ttggtaattc    1800
tccagtttct aggaggtacc tatttctacc gtttcaagtg atgaagcaa aataatttac    1860
attcgatagt gttactgata acaaacctac ttaagagata tgttgctttt tacttaaggg    1920
atagtgttga tagataaatt agaatgtata gataggtttg tgaaagtcta aataatggct    1980
gtatagatat gtatatatgg ttcacacatc tggatctgtg tatttgattt tgtactttaa    2040
atgtgacaaa taaacctttt gggagaaaaa aaaaaaaaaa aaa                      2083

<210> 76
<211> 427
<212> DNA
<213> Homo sapiens

<400> 76
ggcacgaggt catttcagcc ttatgaattg cccagaataa gctagatcac ctttaaggcc       60
atgtggttag ggaaacttgg gcacagaatt tacattttca acttggtga aagatgggtt       120
taaggtaaga atcaaatagg agaaagcctt agctgttcca gcggcccatg tttaaaagaa      180
tgtgcttctt tttccaagta tttctgccgc ttgcatgcac tgagcttctt tggaaaggag      240
caccatgcag gcatattttc cagacaggac cggatttgct cgttactcag aggtgtgtgc      300
attctttgct tttaggatat ttaattagca tcttttaata gtgatattac ggtgtcttaa      360
aagtttatgc atttgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      420
```

```
aaaaaaa                                                                    427

<210> 77
<211> 863
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)..(7)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (298)..(298)
<223> n equals a,t,g, or c

<400> 77
gggcagnagt tccatttctg ccgtggtccc agcagcgtcg ctgtgggtct ggcctgggtt       60
gcgtgtgttt cgtatgtggg ccgtgctccc tgcttggttc ccttttcctg gaacgtgtca      120
ctgcctccct gtctcgctcc gtggacattt ctgggaggtc aggccgtggc cacctggccc      180
cctgttcagg tctgaggctc ccacctgctt aggttcggga agctcaggag tgaggccatg      240
ccctcctcag gacatcccat ccaagccagc catgtccggt gatggccgc tgcccggnaa       300
agtcctttttc cttcttgtaa ctgagaagaa cttgccttga gccacgtcaa gtcccgtccg      360
tcgcagccac tgcccacaag cgtgagtctg ctgtgagcca gcggctccat ggcagggcat      420
cccagcgcca ttcctgcctt cacacacact tgctgccgtt tccctgtgct gggggctgtg      480
cargtctgcc tcggtgtgga cttttctctt aggaaagagc cccaggtcgg ccgagcacgg      540
tggctcatgc ctgtaatccc agcactttgg gaggctgagg cgggcagatc acgaggccaa      600
gagatcaaga caatcctggc caacatggtg aaatcccgtc tctacttttt aagtatttta      660
tacttaaaat ttttgtattt tatacaaaaa ttagcgggt tggtggcaga tgcctgtagt       720
cccagctact cgggaggctg aggcaggaaa atcacttgaa cctgagaggc ggagattgca      780
gtgagccaag atggcgtcca ctgcattcca gcctgggcga cagagcaaga ctctatctca      840
aaaaaaaaaa aaaaaaactc gta                                              863

<210> 78
<211> 1276
<212> DNA
<213> Homo sapiens

<400> 78
gtgagtgtgt ggcactggtg gcctggagcc aaatttagct tgggtgagag ttgacaatgg       60
tagtttttcct tcctcaagcc cctctgtgcc cctagagcac cctggctgtg gctgcctcct      120
tcatccaaga gcagagtcca tgttgggcca ggagactta gatccatgtc ctggtgctgc       180
ctctggcttt gtctttcctc agtgggcagg actgggtctg ctggtccatc tttacccttc      240
tctgagctat gcagccttgg cctgctgcgt ctccggcctg tattctctcc ccttcactca      300
ggccctggga aaccagccca gtttctkgca ggagaggcag aggaggtcaa tgcctttgct      360
ctgggcttcc tgagcaccag cagtggtgtc tctggagaag atgaagtaga gcccttacac      420
gatggagttg aagaggcaga gaaaaagatg gaagaagaag gtgtgagtgt gagtgaaatg      480
gaggcaacag gagcacaagg acccagcagg gtagaagagg ctgagggaca cacagaggtg      540
acagaagcag agggatccca ggggactgct gagctgacg ggccaggagc atcttcaggg      600
gatgaggatg cctctggcag ggcagcaagt ccagagtcgg cctccagcac ccctgagtct      660
ctccaggcca ggcgacatca tcagtttctt gagccagccc cagcgcctgg tgctgcagtc      720
ttatcttcag agcctgcaga gcctctgttg gtcaggcatc cccctaggcc ccggaccacc      870
ggccccaggc cccggcaaga tccccacaag gctggactga ccactatgt gaaactcttt       840
agcttctatg ccaagatgcc catggagagg aaggctcttg agatggtgga gaagtgccta      900
gataaatatt ccagcatct ttgtgatgat ctggaggtat ttgctgctca tgctggccgc       960
aagactgtga agccagagga cctggagctg ctgatgcggc ggcagggcct ggtcactgac     1020
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86

```
caagtctcac tgcacgtgct agtggagcgg cacctgcccc tggagtaccg gcagctgctc     1080
atcccctgtg catacagtgg caactctgtc ttccctgccc agtagtggcc aggcttcaac     1140
actttccctg tcccacctgg ggactcttgc ccccacatat ttctccaggt ctcctcccac     1200
cccccccagc atcaataaag tgtcataaac agaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1260
attggggggg ggcccc                                                    1276
```

<210> 79
<211> 2494
<212> DNA
<213> Homo sapiens

<400> 79
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ggcacgagga gatgtttaag gattacccgc cagccataaa accatcctac gatgtgctgc       60
tgctgctgct gctgctagtg ctcctgctgc aggccggcct caacacgggc accgccatcc      120
agtgcgtgcg cttcaaggtc agtgcaaggc tgcagggtgc atcctgggac acccagaacg      180
gcccgcagga gcgcctggct ggggaggtgg ccaggagccc cctgaaggag ttcgacaagg      240
agaaagcctg gagagccgtc gtggtgcaaa tggcccagtg acccccagac gcggaaaccg      300
ggtggcagcg cccagcctgg ccccaagcat ggaaacgcac aacccctaat cgccctgagc      360
tactgcttct aacacctctt ttcccttgtg tgagggcaaa ccaggctgca ggtggggttt      420
tcacttccta gggtagttta attttaaaat aggccaatgt tggctagtct gtgcctcagt      480
gagatcagtc agctccgagt ggctcccgtg tcgtaacagc aggagcatgg ccgcaacttc      540
ccaggccgag gaagggcccc cggctcggcc tcttgagagc cccacccctg aactggcccc      600
agctcctctt cctgcctctc tcatggcttg ggctggagtg ggctctctgg accgaccag       660
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tctgtcccgg gtactcagtc agcccagtgg gatcttaccc acttccctgc aaggtgcacc       780
tgccccaggc tcaggctgcc cagcggctct tcctggacag tgagagcagg gctgggcgcc       840
tctgtcctgg cccgggagcc gcaggggccc ctcctccaga gcctgggcgc aagcgacaca       900
ggctgccgct gctctcccag gtgaaatcca caccagtcca cgccgggtcg cctgccctgt       960
ctccctactt agacccagtc attctagagg gatccaccgc cacactggcc ggcccacgtc      1020
ctgggtgctg tcatgcccag cttggagtgc cacgtggccg ctgcccactg cccgggcact     1080
gtcatgccca gcttggagtg ccacatggcc gctgcccacg tcccgggcac tgtcacgccc     1140
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tccaaggctt tgtaaaccgg ctggaccacg tctccctggc cccagtgacc ggggggaagct     1260
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atcctcactg agaaggcccc agggcagcgg tcttctccat ctccgctgtt ttggggtctt     1440
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aataacactg gctttgggta gtgccatggc caggagtggg tttccctgcg tctcctcgtc     1560
ccgagggcgc ctgggtcctc ccagctgacg gcagtaaatc cacagtgagt tggggcgact     1620
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ggttttgttt ctttccttct gatctgagaa gacatgaacg ttttctcttc accgccgtgg     1740
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gggccatcaa gatcaaagaa ccaggaggcc tgggagatgc agctggatgg ggcggcctgc     1860
agaccctgcc aggggggtttg aggaccctcc caggtttcc actgcggaac aggagtgact     1920
ctggctgcca agataccttc atggtgttca tgacaagtgg aatcattatt ttcaaccatt     1980
gaaggggggat gcaggcaaga caccttccca gctgctccta gaggggacaa gccaggccct     2040
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acagccccaa acaagcgcca ccgtgggaga ggagaggctg ctgtcactgg taccggatgc     2160
agaccccacc ctgtctgcag gccaccccca cctccctgca gctttgaggc tggcggggtc     2220
tgctcctggg aatggggtgg gagccacagg gacgacccgg ggcgggctga tgtcttcttg     2280
ggggcagacc agagagctca agtttcagag tagaattag gcacttggag cgtttttgct     2340
ggcttgcact ttcttatttt cttattttag agcgcttaaa aaaatccgga aaaatggggt     2400
ttaaaagaac tgtctctttc agtctacatt tttgtttaat acgcttgagc aataaacgct     2460
tacttgcaaa aaaaaaaaaa aaaaaaaaaa aaaa                                 2494
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<210> 80
<211> 1630
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87

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (527)..(527)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (546)..(546)
<223> n equals a,t,g, or c

<400> 80
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gaattcggca cgagattatc tgtcttcttc ttaccaattt atagaacttt ttagtattgc   60
agataaagtt cctcatcgga tatcttctct ccttctattg ggtacctttt tattgtctta   120
atggggggtct tttaatgacc agaagttctt agttttaaaa tagtccagtt tatccatttt   180
taaattgtta gtgctatttg tgtcctgctt gagagatttt tgcctactgc aaggtcaca   240
agatgttttc ctctaaaagc cttttggttt tgcccttttg ttttagatct gcagctcatc   300
tggaattgag tgtgtggtgt gtgtgtggtg tgaggtaggg gtccttttttt tcatatggat   360
atccaattga cccagaacag tgtattgaaa aaaaaaatct gtcttagtca atttggactg   420
ccgtaacaaa ataccataac ctgggtggct tagactacag aaatgtagcg ctcacagytc   480
tggaggctgg aaggccagga tcaagacacc agcagattcg gtgtctngtg aggacccact   540
ttgtgnttca tagatgtcac cttcttgctg tgtcccagtg gtgraagggg caaactagct   600
cccttaaacc tctttttata agatccctaa aacctttaat gagggctcca cctaatgat   660
ctaatcacct ctcaatacct tatcttgggg gttaagattt gaacagagga atttgggggga   720
gacatagaca tttggagcat agcatcttct tttcctcagt gcacagcagt gctgccttca   780
tcatcagtca ggtgtctgta ggtgtgtggc tatttctgga cttggcactc tgtcctactt   840
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cctcagcctc ctgagtagct gggattacat gtgcaccacc acacttggc ttctttcttt   1080
tctttccaay ccattkgttt tttatttctt tccctkgctt tatkgcactg gctaagattt   1140
ccagtgctga ataggagtga tgacagtggg caccccttgtc tttctcccaa cctcagaggg   1200
aaaagtatcc aatgcatttg tagatattct ttatcagatt agcttccttt ctagcggctt   1260
gtgtctttgc attgttttttc atgagcaagt gttgaacttt ttcactgagt ttttccaaata   1320
cttttttccat tgagtttttt tactttaacc gtcatattgc caaaagtctg catttgttat   1380
ttcctcccaa attgctggga ttataggcat tagccactgc acccagccag actttataga   1440
aaatcttgat atctggtcat ggaagtcccc tagcttggtt atttttttt ggtaccgctt   1500
tgtctatttt cggcccttttc catttccatg taactttttag gatcagcttg tcagttccta   1560
ccaaaaaaaa aaaaaaaaaa actcgagggg ggcccggtac ccaaatcgcc gggtagtgat   1620
cgtaacaatc   1630
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<210> 81
<211> 1860
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (912)..(912)
<223> n equals a,t,g, or c

<400> 81
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ctcgagcttc accctcagaa gatggatccc aagagacagcacattcagct cctgagcagc   120
ctgactgagt gcctgacggt ggaccccctc agtgccagcg tctggaggca gctgtaccct   180
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aagcacctgt cacagtccag ccttctgctg kagcacttgc tcagctcctg ggagcagatt    240
cccaagaagg tacagaagtc tttgcaagaa accattcagt ccctcaagct taccaaccag    300
gagctgctga ggaagggtag cagtaacaac caggatgtcg tcacctgtga catggcctgc    360
aagggcctgt tgcagcaggt tcaggtcct cggctgccct ggacgcggct cctcctgttg    420
ctgctggtct tcgctgtagg cttcctgtgc catgacctgc cggtcacaca gctccttcca    480
ggctggctgg gggagacact gccgctctgg ggctccacc tgctcaccgt ggtgcggccc    540
agcttgcagc tggcctgggc tcacaccaat gccacagtca gcttcctttc tgcccactgt    600
gcctctcacc ttgcgtggtt tggtgacagt ctcaccagtc tctctcagag ctacagatc    660
cagctccccg attccgtgaa tcagctactc cgctatctga gagagctgcc cctgctttc    720
caccagaatg tgctgctgcc actgtggcac ctcttgcttg aggccctggc ctgggcccag    780
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ttcctgcttc tccagacttt agcagcctcc tgttcccatt cttggtcaca gctctagcca   1380
cagcagaagg aaaggggctt ccagaagaat atagcaccgc attgggaaac agcagcctca   1440
cctccacctg aagcctgggt gtggctgtca gtggacatgg ggagctggat ggaaatgcct   1500
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tgtgccttgg gcccagggaa ccctccatca acctgagaca ggactcagta tatggttctt   1740
gggtatgccc taccaggtgg aataaaggac acagatttga tttctaraaa aaaaaaaaa   1800
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1860


<210> 82
<211> 1509
<212> DNA
<213> Homo sapiens

<400> 82
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accatcttgg tcctctcccc tcccgttttg ttaaaatatc aggatagcac tcccaggcca    120
ctttggtctc agtgtaagat ccctattaac tatctgaaag gaaaatagag ccaagacctc    180
tggtctcaaa tatataggaa ttgccttct ttagtcttca ggactattgt gtgaaaacaa    240
gtaggggtct aatctcctag aaggtagggg ctttatcctt aaagagaata tgtccccaga    300
ttattagcac ttttagagga gaagccaagg tatgtagggg tgtgtggctg gcccatcagt    360
ggagcacgaa gagagaatgg gataccattg tgggaagaga agaaaagttc ctcaggggcc    420
tcccactgct aaagtttttt gtgagatgtt gatctgtgct tcctggatttgacttttaaa    480
ggaattattc tggcagcaca tgtagtattc ttggatgatc ttgctgctct tatttctcct    540
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gaaaaactgg gccagatttt ctttgttctc catcatttta atgtggcagg ctgttcagtt    780
ttcttactct tacctatgtg atatttcttc gtaacgtgtc caaaaagaaa aaagacccaa    840
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gggttcctaa ttttgggtat gagttagcaa atttaaccat tgtgtttgtg ccctacccag    960
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tgtcccctct tctaggttaa ttctcctttg atttgacttt gttgagaagg aggttggaca   1140
gtagattagc aaagttccaa gtgcaaaatt acagtgtgtt agagtgtggg gggaaaatta   1200
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gcagttctcc taaaacatag ttgtttgttt ttctttaacaaagtttaagc tagtgttaat   1320
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89

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aaattaaaaa aaattgcttg tctgtctact tcagctttgt tttatgccca tttcatattg    1380
ttgtctgtgt tgtaattcat aacttttgat accatttctg atgtgtaaaa ttggttgtct    1440
tgtaaatatc ttataaagag ttcaattgta aataaactat tgtggctgtt aaaaaaaaaa    1500
aaaaaaaaa                                                             1509


<210> 83
<211> 967
<212> DNA
<213> Homo sapiens

<400> 83
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cggggggtcct ggggggccctc ctggggggtcc ttgtggctgg acttgccacc catgaagctt   180
acggagatgg cctggagagt gtgtttccac tcatagccga gggccagcgc agtgccacgt    240
cacaggccat gcaccagctc ttcgggctgt ttgtcacact gatgtttgcc tctgtgggcg    300
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aggaccaagt tcactggcag gtgcctggcg agcatagga taaagcccag agacctctga    540
gggtggagga ggcagacact caggcctaac ccactgccag cccctgagag gacacgctcc    600
ttttcgaaga tgctgactgg ctgctactag gaagttcttt ttgagctccc attcctccag    660
ctgcaagaag ggagccatga gccagaagga ggcccctttc cacaggcagc gtctccacag    720
ggagaggggc aacaggaggc tgggaaatgg tggggagtgg ggccgtaact gggtacaata    780
gggggaacct caccagatgc ccaacccgac tgccctacca gcctgcacat gggtagaaga    840
ggccaaattg aggcacccag tgatccactg gccccacgtc acacagttac agtgaagccc    900
aagccaggcc tggttgaggg tgataaacgc cactgtctct aaaaaaaaaa aaaaaaaaaa    960
aaaaaaa                                                               967


<210> 84
<211> 885
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (233)..(233)
<223> n equals a,t,g, or c

<400> 84
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atgctgatgt gcaggggccg tgcagcactg cattcttctt gccttctctg ttctgtttag    120
tacaaccacc ccagcaggtc tccagttcct gccaggttag tgtggatggc ccagcaccat    180
ctcctctcca tcttgttggc tatcctctct tgttcctcac aaccccgcca ggntcgcggc    240
tcaggagctc tgccgtgtga agtgtgctca gcagttctcc tcacatgtct acgcaaaatc    300
tctggctccc tgtgtgtctg agcccaacag acacactgag cacaggagtt ggctctcagc    360
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ggcaggaaaa gatcattaaa gaaatcgtgg ctgacataaa aaaggatgag ttcatgtcct    540
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gaaaaccaaa caccatgtgt tctcactcat aggtggggaat tgaacaatga gatcacttgg    660
acacagggtg gggaacatca cacaccgggg cctgtcgtgg ggtgaggggg atggggcagg    720
gatagcatta ggagatatac ctaatgtaaa tgacgagtta atgggtgtca gcacaccaac    780
atggcacatg tatacatatg taacaaacct gcatgttgtg cacatgtacc ccagaactta    840
aagtataata aattaaaatt aaaaaaaaaa aaaaaaaact cgtag                     885


<210> 85
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90

<211> 853
<212> DNA
<213> Homo sapiens

<400> 85
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gtatagtaat aactttagca gagctgtaga gagatagatt tgcaaacttg aagtgatatg   180
ggataaatct ccatacgtgg tagaatttta tataaaatgg catatttcaa ggtatgtgtg   240
attatttggt ttcagcaatt ctgtgttgaa gaaactagta tcataaaaaa tgttcgatg   300
ctgacatcag aattccagaa ttcatatgcc acccctgttt ctgggctcct tcctggtgct   360
gtggcttgga ggggtggtgc tgtgtacggg tgggtgaggc acgccatgca ggtattgcag   420
aaggaaccca cgcaaccgtc atcctttcta cccccaagtg atgctgcctc attctggggt   480
cctgaaagta ggcttcactt aacatggtag ggaagtttct ggctgaaaaa gcaaaaggct   540
tttatcactg gagtctatcc tgagcccct gtgcaaaagg cagtgtgaac tcaggggaca   600
gaatcactga agcttttgta aaagcacaac atctgcctat cacagtccaa agggggcttc   660
aaaatcaaga atgtctgtga cggagaagat ggaaacagag cctggctgat gttgtaggt   720
gaatcttctc tgtgtcgaga tgttatcagt gaccgttttc tttatttcat gaagaaacat   780
ttttaatata ttcacctccc tgcatatatt ctgtttactg tgttattgtt aaaaaaaaa   840
aaaaagggcg gcc   853

<210> 86
<211> 400
<212> DNA
<213> Homo sapiens

<400> 86
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accatagccc tcaggcagaa gtccatccct caccaacagg gaagagaggc aggatcaaa   180
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ctgccctcat attcgctaac cgccacttac tgcctggttt tcagcctcac taggatgtgg   300
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<210> 87
<211> 1261
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (481)..(481)
<223> n equals a,t,g, or c

<400> 87
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ggaattcagg ctcaccattt gccgaggcaa gcccatcaac agtctagagg catattctgt   120
gtcattcctt cccgtctcct tcatagaata ctactttttc cttttgtctc ctggccattc   180
tccatcatct gctgattatt gctaaccaca ggatgctggc aaagcttaca gtgataggca   240
catgtgttca gtgatgtcca atacactctt atcacagtgg ttattgcttc ttactctttt   300
caaatgcatt attctacccc tcaacctaya tccaatcatt agaactatac ctgactggag   360
cccagaactt gggaccaata cttaattcaa atagcagggg cttgctcaca aacattaagc   420
ccaamaagaa gcacagcact ttkgaaaagt caaataggsc tttggagct ctgtacattt   480
ngcaatttac attgttatta agtttatagc actaataaca cttcagtcgt gaatctacag   540
tctcaatatg ataagtctta gaacatgttc tagaaatagt ggtaccttgc tgctattata   600
cttagtaact tataccccaa tataataata agtattaaat acagattgtg tatgcattct   660

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ttgtgtgtat atgccaactg tactacttaa cctcactgat gagcaattag aaaaatacac    720
aaattgtcat agtgaaaata agtcttggtc aattcagatg atacgtgaac ctgataaatg    780
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ctcattttaa cagtgaaaaa aaatattatg acctgatgtg ttctcttgta tttgatttga   1140
actacctaaa taggcttaac tgtaataata aatatacaat tttggcaaaa aaaaaaaaa    1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagggcggc   1260
c                                                                    1261


<210> 88
<211> 639
<212> DNA
<213> Homo sapiens


<400> 88
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aggggaccca gttctattcc tgcatcctta gccatcatct acacactttt tatcttttct    180
tttaaatttt taaaaattgt gaaatctata tacatataag ccatatgttc aacttaaaga    240
atagtaaaca actgtgtccc taggatccaa gttaagaaat agatcagagt cagtttctta    300
gaagcttcta tatgtgcttc tccccagtca tgtgctċcc tgtctctacc tgagggaaat    360
tacagatttc atgcttttct ttatagtttt cctttacaca cataccctta agcctctaag    420
tactatatgg ttcggttttg caaagcccag aagcctattt taatgctgta tataagaata    480
tgctagccgg gtatggtgac tcatacctgt aatcccagca ctttcagagg ctgtggcagg    540
agggttgctg aagcctagga attcaagacc agcctgggca atatagggag accccttcac    600
tacaaaataa aaaattaaaa aaaaaaaaaa agggcggcc                          639


<210> 89
<211> 3576
<212> DNA
<213> Homo sapiens


<400> 89
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cagaacactg acagatactt tcctaagatc atggagttaa tacccaccag aacctagact    120
caatacttat ggaacttcaa atctcatgct tttctcattg cacttatgat tactccatta    180
tgtaggagca agggagagtt gagagcattt gaagaggtta tgcaaaggac cagctctgag    240
gagtaggctt agcaaagtaa catgagggaa ggtaacaccg ttcatctgtg tagcggagtg    300
ggagccaaga gacaaggaga aagtttcatg ttcgtcatgt gtctcggata ttccggtttc    360
tgcagggacg agaacgcgca gtttcgcctc catcccttga cctccaacac agcttctcca    420
ctggatcatc ggtggcgatg aaggggcggc t@ggaagga tgtcagagaa accagaagct    480
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cagaaggcgc tcgcctccct agcccgcaaa aacatatcga ttttctcgc tgtggcaacg    960
gggacgtcct gatagatcct ctgctccaat aggcaactcc ggccttccct gccctgacct   1020
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cctgtggagt aggtccctct gttccgacag gtgcgacact tggcgctcca tgcttgcggg   1140
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gatgcttctg agcagtacac ctcattggga tcaatgaaaa gcttcaagaa atcttcaggc      3180
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gatcctgtcg agaagatatc ctctgggggc tccagccacg cgtccagcag gtcagggatt     3360
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gtagccgcgc cctttctgct gcagttttct cttagctata gtaaatcttc ctgagggttt      3540
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<210> 90
<211> 1262
<212> DNA
<213> Homo sapiens

<400> 90
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tttctcgtga agcaagactt ctaaattatg gctataatat cttttgaatt gttgttctta       180
atgaatcttc caactgtaaa ctcatctaat ttcaaactta tcatacctga ggatgtaaca       240
ttgtcctttg tttctcatct tgatattacc gtcaatcatt ttgtatttct gagtacattt       300
gaacttgctg gagtaataga gggaaacct ctgcctgatt ctaaatcaga tctttgtcct        360
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ttgtgtatct tcagagagtt tgttgaaagt agcaatttcc aagtaatttt aaattattga       540
agtctactag cacgaaaggt caaattctta ggatatttaa aaaatgttgt ttaataatca       600
aactcatctt aaaaaatgtt catcagactc tgtctttgat gcacattttg ccaaaagaga       660
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93

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gccttatttc tgtgaaagaa atacagtatg tactttggga tttactaaag taaaactgtt    720
actttaaggc acagagcaga tatagaatcc ccctctctcc ccactcctag tgactggtat    780
tctacattaa tatttatctt ccatgcatag tgtacttgag ggaaaaaaac aataactctt    840
aattgtttaa tatcaaacaa taaaatcctg tgtatcagtg actgtcaata gatggctttc    900
tgtttaaaaa ctgaagctac tccagaagta ggaattaatt tatttagtaa aaaaagtcag    960
tcaaaccaga gccatgtcct ggggaactgt caaaagaatg gttcctaagg gccagaggcc   1020
acatccactg gtagatgaca gaacaaccat acttcagatg gcaaaaccgg tcagtttggt   1080
ttgcgttgtg tgcctatcct ctttctgtgt gcttcagctg aattaagtgc ttggagagct   1140
caaatagttc aagatagcca agatgaccaa ttctgccagg tggcaagcct gatcttgcaa   1200
ttttgattaa aataaagaac attccccaag aacagtttgt tgcaaaaaaa aaaaaaaaaa   1260
aa                                                                  1262


<210> 91
<211> 614
<212> DNA
<213> Homo sapiens


<400> 91
ggcacgagcc aatatccact ctacccagct gggcccccag tctacaaccc tgcagctcct     60
cctccctata tgccaccaca gccctcttac ccgggagcct gaggaaccag ccatgtctct    120
gctgcccctt cagtgatgcc aaccttggga gatgccctca tcctgtacct gcatctggtc    180
ctggggggtgg caggagtcct ccagccacca ggccccagac caagccaagc cctgggccct    240
actggggaca gagccccagg gaagtggaac aggagctgaa ctagaactat gaggggttgg    300
ggggagggct tggaattatg ggctattttt actgggggca agggagggag atgacagcct    360
gggtcacagt gcctgttttc aaatagtccc tctgctccca agatcccgc caggaaaggc    420
tggggcccta atgtttgtcc cctctgggct ggggtggggg gagggaggag gttccgtcag    480
gcagctggca gtagccctcc tctctggctg ccccattggc cacatctctg cctgctaga    540
ttaaagctgt aaagacataa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    600
aaaaaaaaaa aaaa                                                     614


<210> 92
<211> 958
<212> DNA
<213> Homo sapiens


<400> 92
gaattcggca cgagtgagat tgcatccaga cagagtttta aaagtttccc ggttgagttt     60
aatgtacagt tgaagttgag acatgaatct ctgcatgtag gggaaatttttgtgtctggtt    120
agtcaagaaa ctatggaaac caattcttga tattttgaac cattcacgaa gatagtttga    180
gtcatgagca tgctgttgtc tagagtgggc ggggatgact cattggagtg gatgcgctgc    240
tctgtacttg atttttttga gtctgaaatt agctttccag gctgggggcag ggaggggagc    300
acaggtggga tcagtactgc ccccaagcgg tggagctgtg gtggtggatc aaatactgct    360
gccgcctgtc tgcacaaaca tatttctctc ttccagccct tcagaagtgt attggaatat    420
gtcgwtaaca ataatgatgg tagtgaagat gatgatgatg tgggtaattc tggctacctt    480
attgggtcca agctccccac aattcgttgc acaaagcact ctaatacat tctctttagt    540
cctgatcaaa ccacctttca gagtaggatt tagtgtccta ttttaaagat gaaggagctc    600
gggctcagag agagatcgtt tagacacaca cacaactttg gaatgaaaca tttacagccg    660
ggcgcggtgg cgcgtgcctg tagtcccagc tacttgggag gctgaggctg gaggatcgct    720
tgagtccagg agttctgggc tgtagtgcgc tatgccgatc gggtgtccgc actaagtttg    780
gcatcaatat ggtgacctcc cgggagtgga ggaccaccag gttgcctaag gaggggtgaa    840
ccggtccagg tyggaatgaa acatttacaa aaattgacat ttccttatgc atagatattt    900
cactaggtcc ttaaaaccca cgtgaatctg tgattaaaa aaaaaaaaaa aaactcga      958


<210> 93
<211> 712
<212> DNA
<213> Homo sapiens
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94

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<220>
<221> misc_feature
<222> (20)..(20)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (44)..(44)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (56)..(56)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (128)..(128)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (625)..(625)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (692)..(692)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (699)..(699)
<223> n equals a,t,g, or c

<400> 93
tgttgtttgg aattgtggan cggattaaca atttcaccac gggnaaccgg ctttgnccca       60
tggattccgc caaggcccga atttacccct tcactaaagg ggaaccaaaa gctggagtc       120
caccgcgntg gcggccgctc tagaactagt ggatcccccg ggctgcagga ttcggcacga      180
ggtttcctgt cagtgctatt gagattttat tttattaatg tctgcactta gttttacttc      240
ctactttcta cttttattga gagttaaacc tgttgaagtc tcaggttcaa ttcctcaccc      300
tgagcaacct aatgttttat ctcttgttct tcctacattt ggttattgaa actgaagttt      360
taggttacca gatttgatag aagcacataa gactacttac tgctttagtc tcaattatta      420
attgagaaat tatcaattaa caataaggat ttctcttatt tttccccaag ataagttata      480
tatttaaagt gtgttttata gtagaaaggt tttagaatat ttgggttgct aattaattg       540
aaatggcagc tgaagatgtg atttccagcc agggatttat taaaaaaaaa aaaaaaaaac      600
tcgaggggggg gccgtaccca atcgncctat agtgagtcgt atacaatcac gggcgtcgtt      660
acacgtcgga ctggaaacct gcgtaccact ancgctgcnc acacccttc gc               712

<210> 94
<211> 1106
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
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<222> (1017)..(1017)
<223> n equals a,t,g, or c

<400> 94
gagcaagctc attttttttt cctatgaggc ttttgtaagt cctgacctgt atttactgtt   60
aacttcttag cttgggttca tgcacccgca gtcagtataa ctgtggact cataccacct   120
ttggcacagg cttggagtat ggatttatta caggtctgtt tcttttgtt tttctcccat   180
ttatggtcct ggacagaagg taagcttcct tgcaacttcc ctggtccggt gggtagagtt   240
ttcttgtccc ctttccagat gttaggtttt aaacaatgac tgttctttct ccatcatgta   300
gaccaaaggc caagttctgt gtccccatgg gagattaaaa cccaagcccc tatgtctagg   360
tccagtgccc actgatttct ctaattgtga gtctttctgc ttacctagta cctagagttt   420
ctcttcccaa gttttaaaaa tatcagttct aagtaggcct agcgtttcta catatttta   480
gggagagggg acccttctg tggcagctca gtgttcagca ttctgtaag ttagcatgct   540
ctgtgtatag cagatatcac tagtaatagc atttrgtaag tgatgttcac acatgctgct   600
gtcatgaaca ctatctcatg ttgtgtaaca cttctcatttt tccaagaact ttataatcag   660
ccgacttgaa actcacagtc gtcccctcag aaaggcaggg caaatgttgt tatttccaat   720
ttgtcagaag ctcagaaagc ttattctgtt gctgacagtc cttgcaaggg tcagaatcag   780
gaccggagcc ccagatgcgc tggtgtcact gatgtcccgt gccgggcatg agcccttctg   840
tgcaaggagc tccagtgtct cccggacagt gatgatgtga aaacatttag aaccgaccta   900
cacaataagg cagatttca ttctgtaccc aaaacagaa cacagattta atgcagagca   960
aaagggcttt aatcaacaga tatgttcatt tttcacgtag acctatttta caagctnact   1020
tgtaagccag aaaatgacat tcgagatttt caagtgagaa caaatgattt ggtccaataa   1080
ttaaaaaaaa aaaaaaaaaa ctcgag   1106

<210> 95
<211> 1089
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (353)..(353)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (528)..(528)
<223> n equals a,t,g, or c

<400> 95
cggcacgaga aacgcggtgc ttgctcctcc cgagtggcc ttggcagggt gttggagccc   60
tcggtctgcc ccgtccggtc tctggggcca aggctgggtt tccctcatgt atggcaagag   120
ctctactcgt gcggtgcttc ttctccttgg catacagctc acagctcttt ggcctatagc   180
agctgtggaa atttatacct cccgggtgct ggaggctgtt aatgggacag atgctcggtt   420
aaaatgcact ttctccagct ttgcccctgt gggtgatgct ctaacagtga cctggaattt   300
tcgtcctcta gacggggggac ctgagcagtt tgtattctac taccacatag atnccttcca   360
acccatgagt gggcggttta aagaccgggt gtcttgggat gggaatcctg agcggtacga   420
tgcctccatc cttctctgga aactgcagt cgacgacaat gggacataca cctgccaggt   480
gaagaaccca cctgatgttg atggggtgat aggggacatc cggctcancg tcgtgcacac   540
tgtacgcttc tctgagatcc acttcctggc tctggccatt ggctctgcct gtgcactgat   600
gatcataata gtaattgtag tggtcctctt ccagcattac cggaaaaagc gatgggcag   660
aagagctcat aaagtggtgg agataaaatc aaaagaagag gaaaggctca accaagagaa   720
aaaggtctct gtttatttag aagacacaga ctaacaattt tagatggtaa ggttcacaaa   780
taggttgatt tctttcttca gctttctgac atgtccagcc catctctaat gaggactccc   840
agatcatcac tttatggctg ttaggtgttt cccatatgaa attagaggag ctgggtcagg   900
gagacaaaag tcttctatta gtcttatgga tagctcctcc ttgagtgtat tttgtgcaaa   960
agattaagaa gctggactct actgccatta aagctgagag aatcctaagg ttaaaaaaaa   1020

96

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa    1080
aaaaaaaaa                                                            1089


<210> 96
<211> 1254
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1036)..(1036)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1069)..(1069)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1100)..(1100)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1165)..(1165)
<223> n equals a,t,g, or c

<400> 96
gcgtccggag agctacctag tcaacctgtc tctcatgac aacgatggct ccagtggggc     60
ttcagaccag gataccctgg ctcctctgcc tggggccacc ccctggcccc tgctgcccac    120
tttctcctac cagtaccctg ccccacaccc ctacagcccg cagcctccac cctaccatga    180
gctttcatct tacacctatg gtggggggcag tgccagcagc cagcatagtg agggcagccg    240
gagcagtggg tcgacacgga gtgatggggg ggcagggcgc acggggaggc ccgaggagcg    300
ggcccccgag tccaagtccg gcagtggcag tgagtctgag ccctccagcc gaggggggcag    360
ccttcggcgg ggtggggaag caagtgggac tagcgatggg ggccctcctc catccagagg    420
ctcaactggg ggtgccccta atctccgagc ccacccaggg ctccatccct atggaccgcc    480
ccctggcatg gccctcccct acaaccccat gatggtggtc atgatgcccc cacctccacc    540
tccagtccct ccagcagtgc agcctccggg ggcccctcca gtcagagacc tgggctctgt    600
gcccccagaa ctgacagcca gccgccaaag cttccatggc catgggcaat cccagcgagt    660
tctttgtgga tgttatgtag cccactgtgg ggccaggctg ggccgggcgc tcctggtgtg    720
tgactgggtg tcctggccgt catgtgcttg ctcttacagt gcctgggctc agcctaccag    780
ctgctgccat acaggagatt gtggccactg tgactctcac cagcagtgcc tggttcctcc    840
cccttccctc aggggtagac aaggacctt tgattatttt tagctttgtt tttttataag    900
ccttttttggg ggttaaaata gagtttctta catttttggg actttttaa taggcatttc    960
ctctttata tgaagaattc ccatccattg ggccccttt aaccccagaa tgtgacctcc    1020
tcctccagtt acccanagcc ctgccgtttg cagggttggg ggtggtcanc ggtaccgg    1080
ggttaggcat cctagacagn agcctgagga agctgggaga tttgggccat gtagctgcct    1140
ttgttactct atttattta gtcanttgta taaaacacca aataaagcaa tagaggcaaa    1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa        1254


<210> 97
<211> 865
<212> DNA
<213> Homo sapiens

<220>
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<220>
<221> misc_feature
<222> (365)..(365)
<223> n equals a,t,g, or c

<400> 97
gaattcggca cgagtgccct cgtatctaca tgctcaccta taccctcacc cgactttttcc   60
ctcctcctca ccccatcaaa ggcaataatg cacctgtttt tattcatctg ggccttggt   120
cttccccttc atatttcccg agacctcgct ttcttctttc tcttgtattt tttatttttc   180
tatctcttat gtgtccttct ctaaaagtta taaacatgca caaaatcttt ccatctcaaa   240
atataatacc ctttacctgg tgtcccctgc aggccatctt ctttatttat ttacttttgc   300
gccaggtctt cctctgaagc ccaggctggg tgcgtacgcg atcatggctc actgcagcct   360
cggantcccg ggctcaagcg atcctcctgc ttggaggatc agatttttta tccttgcaga   420
agtgataata tggcttcttc ctcatctcct aaacaccagt catctgacat acactgcaga   480
tctaaaatgg gccttacgtg ttctgccctt ccttgcctac ctgttgagcttgcaccgctt   540
ctgtgagtct ccccccaccc acaagagatc cttcttcctt cgcgctccac taacccgaca   600
taaatgttta tcatataaag ttttccgttg cactcttgtg tttatgtctc ctggcttctt   660
caccaagctg tgtgacagct gggccctgtc gcctccttcc tcgtatatgc agcgactatc   720
gcagagccgc ttaatctttg ttgaaggcag ctgcggttca gccctgaggg ccacgggacg   780
gacgccactc attcagycct accggggggcg ctgtggcagc cggcattggt tgccgtgccc   840
tccgcttgtc tcgctcagcc ctcga   865

<210> 98
<211> 1139
<212> DNA
<213> Homo sapiens

<400> 98
acgcgtgggt ccggacgcgt gggcggacgc gtgggagcaa gcccaggcgg cggtggaaag   60
gctggaggac acacctaaac atgtggaatc ccaatgccgg gcagccaggg ccaaatccat   120
atcccccaa tattgggtgc cctggaggtt ccaatcctgc ccacccacca cctattaatc   180
caccctttcc cccaggcccc tgtcctcctc ccccaggagc tccccatggc aatccagctt   240
tccccccagg tgggcccect catcctgtgc cacagccagg gtatccagga tgccaaccgt   300
tgggtcccta ccctcctcca tacccaccgc ctgcccctgg aatccctcct gtgaatccct   360
tggctcctgg catggttgga ccagcagtga tagtagacaa gaagagcag aagaaaatga   420
agaaagctca taaaaagatg cacaagcacc aaaagcacca caagtaccac aagcatggca   480
agcattcctc ctcttcctcc tcctcttcca gcagtgattc tgactgaata caggccctgg   540
acccttccct caagtctcac cagttctgct ctcccatcaa gcttcagatg ccatgttgta   600
ctgggggaat gtagcccttg tgctccccac cccctaccts cacctgagcc tcaccctgct   660
gttgagccct gagtggctag gggaaatggg aagaggattg ccatggcctg gccatcttgt   720
tgctgcttgg ttagatcata tagctaatga attaggcagg ggagctattt tttgaagatg   780
atgaactaaa tgttgaagac aagtttgaga tctgtaaaatgtgattttttt acttccactt   840
ataatacttg tgattgggga ggtttgtgga aattcaatta tgatgaaaaa cctatctttt   900
ttgtaatgtt ggcatacttg gggaatttag tggcaaatac attccccagc aggccttttg   960
ttggttgcac taactgcaag gttgctggga agtagagtcc atttggttga tgagctttga   1020
ctgcggtttt ggaaccttac ctctcctcct tagcccaata tgctgtcttg ggtcctattc   1080
aaataaagtt atttctcctg gtcwmaaaaa aacggcacga gcggcacgag ctacgtgggg   1139

<210> 99
<211> 1222
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (772)..(772)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (796)..(796)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (823)..(823)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (855)..(855)
<223> n equals a,t,g, or c

<400> 99
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gaattcggca cgagcacatg wktatatata tattactgtt ttgcctccat tgaacatgcc      60
ttctacttcc taatttgtgc cagaattgac tagtagacgc tatgaatgca tcatgctctt     120
tggcccattt cgaacactca ggtatgtctg tactcttagt tcatctattc atcattgttt     180
ctacagttcc ctcatgcttt aaaaaatata tggctttttat aatttatcca gcttttttctt    240
gtcattttaa taagagtatg tgtcttatac aactactaca ttcatcccag aagtagaagc     300
aaactattat aatcccatta tttttattcc tactattctc ttttcagaat ttctttttaga    360
tattccttgg atagttttat tcaatcctcc atggctttca gcttatctta tgtttatct      420
tttggttcat attctgcatt ctggataatt cttcatcttc actttctagt ttgttgatat     480
tccttttggt gactataagc tgctctttaa aatggtcaat aatgcctaag atgtttatta     540
tcttgccctt tgcagaaaaa aattttcagc ttttgctctg gaatgatttt gcatctcttc     600
caccaaactt ccagtgtatc aatggccaga aaataatcta tatgttaatt tgttaatttg     660
atggttcatg gttcaaggct gtataattta aaagtttgaa gtcaaacaac acatgatggg     720
ataatcctga tgttacagat tctcaaggga aaatatgttt ttgttttttc tnccaattgt     780
tctartattt acaganaaac ttcttaatta tactgggttg gtnaataartattttcttw      840
actctttcaa tctangtcca rctatgcatc acccccttcgc tgatgagcat taagaaaatc    900
caaatttggc ccgggcgcgg tggctcacgc ttgtaatccc agcactttgg gaggccgagg    960
cgggtggatc acgaggtcag gagatcgaga ccatcctggc taacacggtg aaacccccgtc  1020
tctactaaaa atacaaaaaa aaattagctg ggcgtgatgg cgggcgcctg tagtcccagc   1080
tactcgggag gctgcggcag gagaatggcg tgaacccggg aggcggagct tgcagtgagc   1140
caagattgcg ccactgcact cccgcctggg ccacagagcg agactccgtc tcaaaaaaaa  1200
aaaaaaaaaa aaaaaaactc ga                                             1222
```

<210> 100
<211> 367
<212> DNA
<213> Homo sapiens

<400> 100
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cggcacgagt gtaaatgtca ccaccaaagg tttgcaccct gatcaaaaag agtatgaaaa      60
gaataatacc acaacactta tggcctgtct tggaggcctt ctggggatta ttggtgtgat     120
atgtcttatc agctgcctct ctccagaaat gaactgtgat ggtggacaca gctatgtgag    180
gaattactta cagaaaccaa cctttgcatt aggtgagctt tatcctcctc tgataaatct    240
ctgggaagca ggaaaagaaa aaagtacatc actgaaagta aaagcaactg ttataggttt    300
accaacaaat atgtcctaaa aaccaccaag gaaacctact ccaaaatga aaaaaaaaaa    360
aaaaaaa                                                               367
```

<210> 101
<211> 875
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (66)..(66)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (872)..(872)
<223> n equals a,t,g, or c

<400> 101
ggcacagcgc gaggctgggt cccggcccag gagaaggaag tcgctgaagg cagtggccat   60
gctggncgtg gaaatgggag gcggttgcag rgggtctatg gggcccggtc ctggatactc   120
ggcaggaagc cgtgtctgca gaggctcctc cctgcctcag gtggccccgt tcaacccccag   180
ccgtgcccat ctcctgccac cgcctgtcgg tggggggttta aattcggtgt ggctttctgg   240
ggtgcagctc agcaccccccc cttatgcaga ctgggagggg gtcgggcagt cccctcagcc   300
acgaggaccc tggatgggtt ctagttcact tgggaccgtg gggcctggct gcgtactgag   360
tgggtgcccc acagtcaagg ccaacggggg ctcccctgc tctgagatgt tgggagaaag   420
gcggcttctg gaaccttccg tgggacccgt aagtggctgt ccagaaaggc gggagggtgg   480
gcacgggca cggggggcag ctggggtcgt cgttaagggt cacgcatccg tacagttgaa   540
tttcctttct cttatcatgt tttacccacc ttgtccttt tttccccaat tgtgcttttg   600
catttttttc cttggcaaat gtaaactcag cctttcattc atgacgtgtg aaatttcagt   660
ttctctggag tttgtcagac ggcgtgggaa ccacgcctga aactcaggta ataggaggaa   720
aaaaaaaaaa cttaaaaaaa tttttaaaaa acataaaact actctctacc tctgctggsc   780
cagcctgtct cgccctggcc gcggcagggt ggcctgtaac aatttcagtt ttcgcagaac   840
attcaggtat taaaaggaaa aaaaaaaaaa anggg   875

<210> 102
<211> 1283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 102
ngggcgttcc atcgaggcct ttgatcgcag catcgacctg ctggtgtcgc gcctgcgcca   60
gaagctgggg gatgacccca aggctccgca attgatcaag acggtacgcg gcgaaggcta   120
cctgttcgac gcccgggata tcggttgatg cgcgcgccct tcaacacgct gttcgggcga   180
ctgttcggcc tgttgctggt ggcgattgtg ctggcccatg tgctggcgtt cttctggttc   240
caccactacg gcccgccgcc accaccccgc gcggccttcg tcgaacaacc agatggcagc   300
ctcacgccct tgcgcaaagc gcctcgcccc tggttcggcg gcccggtggt gcccctgaca   360
tttcaattta tctcgctgat catcgctgcc tggtacggcg ccaaactgct gagccggcca   420
atccagcgcc tgagcgcagc ggccgagcgc ctgagcgtcg acctcgacag cccgcccctg   480
gtggaaaccg gccctcgcga agcacgccaa gcggcctcga ccttcaacct gatgcaaaag   540
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100

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ggtgggttga cggcggtgat gtggttgccg agggtttaag cactcccatt tacctgacgc    1200
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gttggctggc ccaccgctat cgc                                            1283


<210> 103
<211> 2777
<212> DNA
<213> Homo sapiens

<400> 103
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gcaggtgaca tgcagcttcc agatacccac acactgcttt tctcccgccc agctcccacc     180
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ggagctggga tttcgattgg ctatctgcct ccctaaccaa gctgtccctt ccacctcatc     360
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tgaggcagga aatggcgtg aacccgggag gcggaacttg cagtgagccg agattgcgcc     2700
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aaaaaaaaaa aaaaaaa                                                   2777
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101

<210> 104
<211> 710
<212> DNA
<213> Homo sapiens

<400> 104
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agccaggctg agaaaacagt tactcacatt gagcagtgag tgaccactag gtgggcattt     180
gttcatagct gcatggagaa caagtgccca tatacatctt tctgctgatg cagcctctaa     240
attttgaatg catcagtttt ttaaactgca ttgagcaata ttccgtgggt ggatccata     300
atagcgtaac tatttacgcc tgtgacagag aggaaaactg tatggatatc agatatcttt     360
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agagttcaag gccatcctgg ccaacatggt gaaaccccat ctctactaaa aatacaaaaa     540
ttagctgggg tgtggtggca ggcgcctgta accccagcta ctcaagaggc tgagacaaga     600
gaatcgcttg aagccaggag ttggagattg cagtgagcca agatcatgcc acttcactcc     660
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<210> 105
<211> 1540
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (651)..(651)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1124)..(1124)
<223> n equals a,t,g, or c

<400> 105
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aaggtgtcag gaaggtcatg ctctctccaa agtctccaag gatgctcctt ccttgcctcc     180
tccagcctct ggtcgtggcc aacatcccga gggttcctg gcttgcagat gaatcactta     240
atcccacccc catcatcaca tggcagtccc cctgtgtagc tcagctctgt ccaaatttcc     300
cctttcctac aaggacatta gtcactggat tatgacacag ctcatcttaa ctggattata     360
tctgcaaaga ccctgttata tctgcaaaga cgagttaaca ttcacatgtt ccaggggaga     420
tatgaatttt aaggggacag tattggaccc agtataggag ggcaggcagc agcgagggag     480
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cttcgagyta cgttggaccc ctgggcccac ttacagcaag gagcttgccc ntycgtgtag     660
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cggggggaca tgaaagggag cgggcaagga cggaaattac acttctccta gcaacctggt    1200
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102

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aatataccccc  ggctcagcct  gcccccatgct  gagccccgcc  tggggcagtg  cagggagcca  1320
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ctcggtcccc  aggaggccag  agcggtcctg  ccctctgcct  gagcatggct  cagctccagc  1440
ctccacttgc  cctcccctat  gctggccagc  tcgggggtct  gcaggcagcc  tgtgggggcag  1500
ggccagttgg  ccaaactctc  caagccagaa  gcccctcgag                          1540
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<210> 106
<211> 1428
<212> DNA
<213> Homo sapiens

<400> 106
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tggtggcaaa  tccaaaggaa  agttatggcc  gttcatcaaa  aaaaataagg  tactgatggt   180
tggcgtgaaa  tgagttttct  aaggtgtgga  gattttgact  tgatctttta  gtcttagaaa   240
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tgttgagaca  gtatttcttt  ttggtggtgg  tatctttgcc  atggccctgt  gtcttatttc   360
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ctgtttccac  aaccttagca  ttgaaggtct  ttcattttct  cccatcaagc  tatgttagtt   780
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cggctccatc  tcttacatgt  agcttatgtc  cctttaaca  tccccccatc  agcctcccc   1140
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tttcccataa  catataaaaa  agttaaaaaa  aaaaaaaaaa  aactcgag                 1428
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<210> 107
<211> 3061
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2755)..(2755)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2849)..(2849)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2919)..(2919)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2983)..(2983)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2987)..(2987)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2998)..(2998)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (3027)..(3027)
<223> n equals a,t,g, or c

<400> 107
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104

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gctttggtaa tatctcctaa aaatgaggtt ttggtaattt ttcctatgca ttgggcaact    2220
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tgttgttcca tttggaacaa gagtccncta ttaaagacgt ggactccacg tcaaagggcg    3060
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<210> 108
<211> 1691
<212> DNA
<213> Homo sapiens

<400> 108
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tgctgaagca gaggcggccg atgggcttcc ccccgggggcc gccggggctg ccatttatcg     180
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gccaggtgta cggagaggta cagcccgac gggccccggg cagggagggc cgccaggctg     300
gcccgggctg gccagggcct tcctggttgg attatggcc gcccctgggc cgactagtcg     360
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ctattcggga ggctggggca ggagagtggc gtgaacccgg gaggcggagc tttcagtgag    1620
ccgagatcgc gccactgcac tccagcctgg caacagagc cagactccgt ctcaaaaaa    1680
aaaaaaaaaa a                                                        1691


<210> 109
<211> 1421
<212> DNA
<213> Homo sapiens
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105

<400> 109
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<210> 110
<211> 1489
<212> DNA
<213> Homo sapiens

<220>
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<222> (7)..(7)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (345)..(345)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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aactgcaaca agccgcgctg ggagaaatgg ttcatggtga cgtttgcttc ctccacgctg   180
tggatcgcag ccttctccta catgatggtg tggatggtca caatcattgg ttacaccctg   240
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<212> DNA
<213> Homo sapiens

<220>
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<222> (3308)..(3308)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (3469)..(3469)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (4119)..(4119)
<223> n equals a,t,g, or c

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gatgcccttt gcctttttct ttctggaatc agaaggcttt gctggcctga aaaagggaat   180
ccgagcccgc attttagaga ctttggtcat gcttcttctt cttgcgttac tcattcttgg   240

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gatagtgtgg gtagcttcag cactcattga caacgatgcc gcaagcatgg aatctttata    300
tgatctctgg gagttctatc taccctattt atattcctgt atatcattga tgggatgttt    360
gttacttctc ttgtgtacac cagttggcct ttctcgtatg ttcacagtga tgggtcagtt    420
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108

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aattatttta caattataag ttttcagatt ataacatttg tattaatttt tactgatttt    3840
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<210> 112
<211> 1477
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (7)..(7)
<223> n equals a,t,g, or c


<400> 112
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actgcaacta gatgaatcag ctgatgtttc aggacttgct gtgctgcttg tgtttgttcg   180
ttataggttt aataagtcta ttgaggaaga cctactcctg tgtgaatctt tgcaaagtaa   240
tgctaccggt gaagaaatat tcaactgtat caacagtttt atgcagaaac atgaaattga   300
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tttatgtgag gaaatgggtg ctcagcacac agcacttctt ctaaatacag aggtgaggtg   600
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aaattggagg agtttgcatg tctcatgata accaaatgta agatgaaaat aaaagatgat   1440
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<210> 113
<211> 1984
<212> DNA
<213> Homo sapiens
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109

<400> 113

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ttataaagat tttttttta gtttggtagc acatttgta caaaaatgt caaacactgt      180
gctgtaagaa tatccatgtt tgtagaaatg tccacttttc agataatata atgcctacca    240
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atagcctcct tctcctcatt tttaaactgc atacattact ttcaaaatag gtatagatat    420
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ctgatgttaa tgataagata cataatacat gtatcttgtt gctgaaaata tttttttgcat   1920
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<210> 114
<211> 1513
<212> DNA
<213> Homo sapiens

<220>
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<222> (1463)..(1463)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1503)..(1503)
<223> n equals a,t,g, or c

<400> 114

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ccagcagtgc cctcagcccc accctcctat gaggagcca cctctgggga ggggatgaag     180
gcaggggcct tcccccagca gtgcctctcc accctagctg ggcctatgtg             240
gacccccagca gcagctccag ctatgacaac ggtttcccca ccggagacca tgagctcttc     300
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<210> 115
<211> 2312
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2312)..(2312)
<223> n equals a,t,g, or c

<400> 115
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cctgggccct cttctcgccg ctcctcgcag ggcttgcact actgggagtc gggccggtcc     180
cagcgcgggc gctgcacaac gtcacggccg agctctttgg ggccgaggcc tggggcaccc     240
ttgcggcttt cggggacctc aactccgaca agcagacgga tctcttcgtg ctgcgggaaa     300
gaaatgactt aatcgtcttt ttggcagacc agaatgcacc ctatttaaa cccaaagtaa     360
aggtatcttt caagaatcac agtgcattga taacaagtgt agtccctggg gattatgatg     420
gagattctca aatggatgtc cttctgacat atcttcccaa aaattatgcc aagagtgaat     480
taggagctgt tatcttctgg ggacaaaatc aaacattaga tcctaacaat atgaccatac     540
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catggcatcc agcattgacc actacaagta aaatgcgaat tccacattct catgccattta     720
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tctacttagt gagatctggg atgaagcagt gggttccagt cctacaagat ttcagcaata    1020
agggcacact ctggggcttt gtgccatttg tggatgaaca gcaaccaact gaaataccaa    1080
ttccaattac ccttcatatt ggagactaca atatggatgg ctatccagac gctctggtca    1140
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111

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tactaaagaa cacatctgga agcaaccagc aggcttttt actggagaac gtcccttgta    1200
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taaatcaaat taaggatgcc atggttgcca ccttctttga catttacgaa gatggaatct    1320
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ttgttccttt gtggaatgtg ttgcatgtac tccagtgttt gtgtatttat aatttattt     2220
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<210> 116
<211> 6107
<212> DNA
<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (5892)..(5892)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (5896)..(5896)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (5906)..(5906)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (5957)..(5957)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (5966)..(5966)
<223> n equals a,t,g, or c

<400> 116

112

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gttattgtta ttattaattg gctttctgta ttctatgcct tttatttata aagacactaa    240
gaaaacccat gtttgtaatt ttaataacat ttttcccatc ttgtaatatc cagagctact    300
ttataaattc tctgaaccaa aagtattttc ctcagtgtat ctcttctccc ccagccccta    360
ttgggaaaaa ttacccagta tagttcaggt tatgaggagg atcagccaca caatccagtg    420
cttcagtttg aaaatgtaaa attctaaccc taaagtaggg ttggttgaaa ttcagacaa     480
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ttctgaactt ttttctaaga gattacatag gagactaaag aaatctatct gttcaagttc    600
taattaggat gattgttaat actgcactgt ggatgaagtg gcgactggct tgtgtgctga    660
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113

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<210> 117
<211> 767
<212> DNA
<213> Homo sapiens

<400> 117
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gggtgtgcat taagagtaca ttgacctgtc tgtctccagt cttgactctt ttggaagaga    180
gatgctagta ctgatgacaa cctgcattct ggctgcggtg tgygtccaca ctgcacagtg    240
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114

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agcctcagaa gtcaggagag ggtggacttt caaccacgac tgaaaacact gtctttctta    360
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<210> 118
<211> 1932
<212> DNA
<213> Homo sapiens


<400> 118
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gactcctcat aaccactgga taattttttt attttttttt ttttgaggct aaactataat   1860
aaattgcttt tggctatcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1920
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<210> 119
<211> 3436
<212> DNA
<213> Homo sapiens


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115

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116

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<211> 1256
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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tccttcaagg acaagtccac gtatatcgag tcctcgacca aagtgtatga tgatatggca   180
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<211> 1057
<212> DNA
<213> Homo sapiens

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117

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<211> 2683
<212> DNA
<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2676)..(2676)
<223> n equals a,t,g, or c

<400> 122
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gattctgttt gtgtgtgcat attttatcca gccttaagtt ataaagctca tctgtcccgc    240
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118

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<210> 123
<211> 3881
<212> DNA
<213> Homo sapiens

<400> 123
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119

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<211> 728
<212> DNA
<213> Homo sapiens

<400> 124
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catccagaga gtgaggttag gaaataaaaa gtatataaat attagatgcc tagaaatgca    180
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<210> 125
<211> 986
<212> DNA
<213> Homo sapiens

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120

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<213> Homo sapiens

<400> 126

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121

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ctattggtaa aaaaaaaaaa aaaaaaaaaa aaa                                  4893


<210> 127
<211> 1410
<212> DNA
<213> Homo sapiens

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ggaatcattt aacagagata cttgtaaaaa ggacttttgt ttttctatac agaatgtaaa    180
ctctactttt ttactgtcac ttgcagtttt tagattctct gaaagattct ctgatagcaa    240
ttttttgttt actacacctc caatttgtag tgaaaagaat gggctgctataccattggat    300
ttaggtcagg tactatttct gtcatttctc agtctcgtaa tcttgggcag gttactaaca    360
ctgaattgaa ttttcctcag cagcaaacta gagatagcaa tttttttatta tagtattatt    420
atgaatatta aataacttca catacatcat gagtgcaagt gctcaataaa tgttaattta    480
ttcctccttt ttaagtgttt gtaaactaca cagagtatct caaactgcag atacaaaata    540
ctcaaaggat ggtctccatt ccaggatacg ctataggaga gcactttctt acttgatcac    600
cattagcata ttgccttctt cccagcaatc cacatggctg gaaggagatt cctctcctac    660
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122

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tgtttacttg ccaagggaac attttttgtt gttttttgag acaagtctg tcgcccaggc    720
tgaagtgcat tggtgtaatc acagctcact gcagcctcga cctccctacc tcagtctcct    780
gagtagctgg gaccacaggt gagtgccacc acacccggct aattttttaa aaacattttt    840
gtagagcctg ggtaacatgg ggtggaacaa gcctgtagtc ccagatactc aggaggctga    900
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aacctatacg ttttttttttg ttttttttttt gaaaagccag accttgtgcc cttgttttga   1080
acaccgactg ggaagatggg gcttaggtaa cagccaaacctggctgtcag ctgtgtggga   1140
gccaccaccc tctctgggaa gagttcctgc ttctgtatgg caagcataaa tcaagctcag   1200
tctgggttat ggagaagttg aaaattgttt tgttcctcat tagtttataa ttgtatgaaa   1260
tacgatttta atgaaaactt ttcagaattc acgtttgtgt agatatttca gagaaccatt   1320
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tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                     1410
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<210> 128
<211> 1727
<212> DNA
<213> Homo sapiens

<220>
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<222> (979)..(979)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1047)..(1047)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1135)..(1135)
<223> n equals a,t,g, or c

<400> 128
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gccgccggct gctcctgtcc tacagcactg ccaccctggc cattgctgtg gtgcccaacg   180
tcctggccaa cgtgggtgcg gccgggcagg tgctgaggtg tgtcaccgag ggccccacag   240
agagtctcct caataccact caccagctgc atgcagcatc cagggctctg ggccccacag   300
gccaggcagg cagccggggc ctgacatttg aggcccagga caatgctct gccttctacc   360
ttcacatgct cacggtcact cagcaggtcc tggaggattt ctctggcctg gagtccctgg   420
cccgggcagc agcgctaggg acccagccgag tggtcacagg gctgtttatg tggcctcc   480
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caactgtgcc catcacgctc acggtcaagt atgatgtggc atacactgtc ctgggcttca   840
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accaatggga gctccgcctc acctccgccc gctgcccact gctacccgcc cggcgtcccc    960
gcgcagctgc cccgctggnc gcgggggggcc tgcagctcct ggcgggctcc acggtgctcc   1020
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aggcgaggag gatccgccac ctacacgccc ggctccagcg aagacacgac aggcnccaag   1140
gccagcagct gcccctaggg gatccttctt gcgtccccac acccagacct gcctgcaagc   1200
ctccggcatg gatagcctac aggctggatg ccttaagaac cgagagcagt gagggagaag   1260
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123

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gtgtgacctt gggtaagtca cttcacctct ctgagcctcg gtttctacat ctgcataacg    1380
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gaaatactgg gcatgatagg cctggataac cggtaaagaa ccatgcaaag gcgaagacaa    1500
ggagtgcaga gagagctcat ggttcctcca ggctggttgg cgatcaggct catctcatct    1560
gcaccaactg ctctacttgt tagatggaga ccttgcatca tgaatttctc gaaatgctcc    1620
tggaacttat ttatatgcct caaaatcctc taaactcatt tatagtaacc catagtttta    1680
attttataaa taaacgtatt tattaaatct taaaaaaaa aaaaaaa               1727
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<210> 129
<211> 1353
<212> DNA
<213> Homo sapiens

<400> 129
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ttttttaca tcctttcacc tattccatac tgcatagcaa gaagattagt ggatgataca    240
gatgctatga gtaacgcttg taaggaactt gccatctttc ttacaacggg cattgtcgtg    300
tcagcttttg gactccctat tgtatttgcc agagacatc tgatggggcg cctacccttc    360
ttcagcaaga tgggaacagc tgagtctgaa ggaagagaaa cactgacaca gcagctgcct    420
ctcccagcag ccgccatgag aagattgtta cctgcaagca gagtgtccac tcaacccgtg    480
ctgaggctgg cagacagtgc tgagtcactt ctgggcaggc ctgctctgtg ggctctagga    540
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aatgaaactg ccattgcaaa attataactg agacagtgaa agaagtctga cctaaccaac    720
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ttgtggcccc cacccaggag ctgactcaat gcaagaagac tgttctgact ccctatgatt   1140
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<210> 130
<211> 2504
<212> DNA
<213> Homo sapiens

<400> 130
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gcatcctcgg catggtggag ctggcgctc agtccatcgt gtatgaactg ccatcattg    180
tgtacatggt ccctgcaggc ttcagtgtgg ctgccagtgt ccgggtagga aacgctctgg    240
gtgctggaga catggagcag gcacggaagt cctctaccgt ttccctgctg attacagtgc    300
tctttgctgt agccttcagt gtcctgctgt taagctgtaa ggatcacgtg gggacattt    360
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<210> 131
<211> 1905
<212> DNA
<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1828)..(1828)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1837)..(1837)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1846)..(1846)
<223> n equals a,t,g, or c

<220>
<221> misc_feature

<222> (1860)..(1860)
<223> n equals a,t,g, or c

<400> 131
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gggctggtgg ccgccaaggt gctcagcgat gctggacaca aggtcaccat cctggaggca   360
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ctcttggaat atcttctcgg ggagggggaac ctgagccggc cggccgtgca gcttctggga   708
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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<220>
<221> misc_feature
<222> (751)..(751)

<400> 133

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  cacactcaga aaaaagcaag gatcagacaa gaagaagagt ccccacccct cccgtccccg   180
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  acaaccaggg ttacatgcag agtcccaggc catctgcagg ttttggaggc cctgtgcggg   600
  gcctgggggt ctatgtttaa acacgcccctt tggtggtcc aagtycccag aascagggga   660
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  gaggtcattg ggcatataaa agtgcatata cgtgcaagta aaaataaaag ctagcagcaa  1140
  aacttatata gttggsccty catgtccgtg ggttccacat ccttggattc aatsgamtgg  1200
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<211> 1564
<212> DNA
<213> Homo sapiens

<400> 134

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128

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<211> 1734
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<222> (1703)..(1703)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1731)..(1732)
<223> n equals a,t,g, or c

<400> 135
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<210> 136
<211> 2916
<212> DNA
<213> Homo sapiens

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<211> 1748
<212> DNA
<213> Homo sapiens


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<211> 3116
<212> DNA
<213> Homo sapiens


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131

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<210> 139
<211> 2339
<212> DNA
<213> Homo sapiens

<400> 139
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132

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<211> 2679
<212> DNA
<213> Homo sapiens

<400> 140
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<210> 141
<211> 1277
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1207)..(1207)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1272)..(1272)
<223> n equals a,t,g, or c

<400> 141
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134

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<210> 142
<211> 1266
<212> DNA
<213> Homo sapiens

<400> 142
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<210> 143
<211> 2803
<212> DNA
<213> Homo sapiens

<400> 143
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa                      2803

<210> 144
<211> 961
<212> DNA
<213> Homo sapiens

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agacggttcc ccttcattgg tgaggatgac aatgacgatg gtcacccact tcatccatct    180
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gtattcatct cactacattg atttgtttgt ggtagttttt ccttggactt aatttatatt    900
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a                                                                     961
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136

<210> 145
<211> 2207
<212> DNA
<213> Homo sapiens

<400> 145
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catttgaggt tatgttctat aagttaacgt tgatcttgtg tgagctttcg gtagctggag   180
taacacaggc ggcctcacag cgacctctcc agcgccttcc aaggcacatc tgcagccagc   240
gtagctcctc ctgggagatg cctcctcaag gccctgctcc agaccacgtg gggagggcct   300
gacagccaat tcccaggctg tccccaccct tggagagtga ccctaaacgc tagacagatg   360
gggaatggga aagaaaagaa agctgcagac ctcaagttaa aattccctca aaaacgtttt   420
tatttatctg cttttttctga aaggataaag gctttttgaa aattattttc taacaaataa   480
catgaacact tctagaaacc ctagaaaaac acaaagtatt caaaatagaa agaaaaatta   540
cccattactc tttaagccag cattatccat tgcggtgctt ttggagttgg gtgaggccgt   600
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gccaatagga atttaaaat aacatggaac ttacacaaaa ggctttttcat gtgccttact   2100
tttttaaaaa ggagtttatt gtattcattg gaatatgtga cgtaagcaat aaagggaatg   2160
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<210> 146
<211> 2070
<212> DNA
<213> Homo sapiens

<400> 146
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ttttgatatt gtaatcttgt cctcatctcc acaactgagt tggggcctga ggggtttaag   180
agttctcact ccatcacagg aggcaagggg taccctttgtg aaccagactt caactcctgg   240
aagtcttgtt cagttcatag gcaaatatct ttgcaagttt agtatgagac agcccaacgg   300
ttaaataaat aagacacagt gccatggttc taggcatttg gagagggaaa aggcacatta   360

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<210> 147
<211> 566
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (68)..(68)
<223> n equals a,t,g, or c

<400> 147
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cgggtcgncc cacgcgtccg gtcagagaga aagaactgac tgaaacgttt gagatgaaga    120
aagttctcct cctgatcaca gccatcttgg cagtggctgt tggtttccca gtccttcaag    180
accaggaacg agaaaaaaga agtatcagtg acagcgatga attagcttca gggttttttg    240
tgttccctta cccatatcca tttcgcccac ttccaccaat tccatttcca agatttccat    300
ggtttagacg taattttcct attccaatac ctgaatctgc ccctacaact ccccttccta    360
gcgaaaagta aacaagagg aaaagtcacg ataaacctgg tcacctgaaa ttgaaattga    420
gccacttcct tgaagaatca aaattcctgt taataaaaga aaaacaaatg taattgaaat    480
agcacacagc attctctagt caatatcttt agtgatcttc tttaataaac atgaaagcaa    540
aaaaaaaaaa aaaaagggs ggccgc                                          566


<210> 148
<211> 1242
<212> DNA
<213> Homo sapiens
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138

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<400> 148
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gtggggctgg ggctagggct gggggggaggg ggaaggcctg gggcaggagc ctctgagctc     180
tttccttctg tgaccacgga cctgtcaagt ttccaaacag aaaggtgtgc ctcacttgtg     240
tggattttgt cacttgtgca tgtatgtatg ggtttctggg gcattggtcc tggtgctctc     300
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gtcctgggag tcctcttcat ggccgtcagt ctaggcttta tgttgccaa ctgggccaca      780
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tggttcccat gaacgtggtt gtcagaggcg ggggacaagc agaggcttgc agactggccc     960
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ccatgggagg aggaggagga ggaagaagag gaggaggagg aggaggagga ggcggaggag    1080
gaggaggcca ggtcctggtg gagcctttgc ccagcccagt cctctctgcc tcctcctggc    1140
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caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa aa                         1242


<210> 149
<211> 712
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)..(26)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (28)..(28)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (77)..(77)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (117)..(117)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (124)..(124)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (696)..(696)
<223> n equals a,t,g, or c
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<400> 149

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accnacgcgt ccgaggaggt cytttaggaa gactctcaaa ggcaaatccc tgatcccccg   180
ccccaccctt agccctgccc tctcaccaga gcaaaattca ctggggactt ttcccaccac   240
acatggaaat ctgtccactc ggaatacctc tgttttccat ttcaaattgt aggggggaggg   300
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gagaatcact gtgggcgtcc attcttattc aactaaatct ccacaggttt ttgagctgg    540
tgtggattag tttaactctt gtattcaacc attagtgcta ccaccttctc acattacaat   600
acaattactg gaagcaagta ctgcatttcc tatgcaacaa aaaaggaaaa ataaaaaatt   660
gctaatgcta aaaaaaaaaa aaaaaaaaaa aaaaanaaaa aagggcggcc gc            712
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<210> 150
<211> 1200
<212> DNA
<213> Homo sapiens

<400> 150

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tgtgaccagc ctgctgtctg tggtgtgccc tcctggcccg gccttggcacatgttcgttt   180
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tgcctgcctg tgccaggggt tgtcaagggc ttttgggtca gagtgggcac ccctttctcc   300
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caggctgccc aagcgccaga ggtgacctat gaggcagaag agggctcctt gtggacgttg   420
ctactcacta gcttggatgg gcacctgctg gagccagatg ctgagtacct ccactggctg   480
ctaaccaaca tcccgggtaa ccgggtggct gaaggacagg tgacgtgtcc ctacctcccc   540
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cagccgattg acttctctga ggacgcacgc ccctcaccct gctatcagct ggcccagcgg   660
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agagtaaaga cacagctcca gaggcccaca ctgtggggtctgggccctgc cttaggcagc  1020
ccccctcttt ggccccctcc cgtcaggccc agggcttgga gtgaaagtga ctctcaggtg  1080
gtggggtggg gaatgtgaat aaacatgatt tcttgccggg aaaaaaaaaa aaaaaaaaaa  1140
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<210> 151
<211> 1352
<212> DNA
<213> Homo sapiens

<400> 151

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140

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taagtgcttt gggtgattca gggtgattag ggtaggatt ccatcttcaa gaagcctccc    600
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gggcccagta attactttgg tatccagatc attagagaac ggaatgcctt ctattgaact    720
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<210> 152
<211> 639
<212> DNA
<213> Homo sapiens


<400> 152
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gcatcacttc tgccctatgt gttctggaag ctttaaagaa ttatatttag tgcctatac     180
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gaaaagtggt acttaaaaaa taacaaacga ctctctcaaa aaaattacat taaatcacaa    480
taacagtttg tatgccaaaa acttgattat ccttatgaaa atttcaattc tgaataaaga    540
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                           639


<210> 153
<211> 1434
<212> DNA
<213> Homo sapiens


<400> 153
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tttggagctg acagttattt tgtgtaagca gagatttaat tttatattga aagtcagtgc    120
aaaattatga ataggatata ctaataaata caaagtaata acaaaagtca aagcagtgtt    180
ctaaataaaa attctgggtt ccttaaaaat tattttaaat ttatcttgaa atagttttct    240
tagattaatc tcaggatatg agaaagtcaa ttaagtgtga gtaaagttag tacattaaa     300
caaattgtct attaaatgca mgagtggtaa tatacagaat ttatcaggca ttaccaagtc    360
taggcacata taggaaatgc agcactcaga atggtttcaa tgtagtagtt gatgcttgta    420
aggtagggga gcttattcag acatagtaga tagtttctct aatgctgtst caattgctgg    480
cctttggcta cctgtacttc cscattatgg cagcccattc agtcttgagt tttcttctct    540
ggacacctta tgctctgaaa tcatgagcga ggctgattca attggtgatt tgggtagaaa    600
gcagtatgtt ttgctgacat taagatgtag gttatagata ggtttagcct ttaagtgtat    660
gttttttatac tttaaaataa gaaatataac cttttaagct attccactc ctcccccagc    720
ctatctcaaa ctggtggaat atatggagag atcttgaaag aagtaaaata aaccttcact    780
gctccactcc aggtgaatcc gcccactccc actgacctag tagaatttgt aatttaatac    840
ttaccttcta tttctgaaat cagttgtgaa ctgttgcctt atgttcagar gtttaagaac    900
ctcmgtgaat tcattttttta aaatctgcta ttctgagaag cattgaatga attcttaaca    960
agaagactca tctgtagctg tttgctgact cctatgagcc ccataagggt tctgtgctta   1020
gcattaacaa aataaggttt ataggtaaag ccaatgtatt aatttttttt tgcatggagg   1080
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gctttaaaat ttgtgctctt tttcatattt tattcatatt aatttatgg tttgtaactg    1140
cttttttaggg agataattat atgttataaa ttagtttttgg gggaataat tgtgcaaaga   1200
ggataattta atttacgtgc ttctgttatt cagaataaag agagaagact acgctgcata    1260
ttcaagagtt gtaccttaac attggtgaaa cattttttct aagattttca aaaggaatat    1320
gtgtaaattg agaaatcata accactgtcc taacttggta aacaaactgt tcttaaataa    1380
agtatttaat gattttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa           1434
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<210> 154
<211> 370
<212> DNA
<213> Homo sapiens

<400> 154
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ggcacgagtt gcggtgaacc agaattataa cagtgagctc actgactgt tttaggatgt      60
acagcctagt gttaacattc ttggtatctt tttgtgcctt atctaaaaca tttctcgatc    120
actggtttca gatgttcatt tattatattc ttttcaaaga ttcagagatt ggcttttgtc    180
atccactatt gtatgttttg tttcattgac ctctagtgat accttgatct ttcccacttt    240
ctgttttcgg attggagaag atgtaccttt tttgtcaact cttacttta tcagatgatc      300
aactcacgta tttggatctt tatttgtttt ctcaaataaa tatttaaggt taaaaaaaaa    360
aaaaaaaaaa                                                           370
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<210> 155
<211> 2067
<212> DNA
<213> Homo sapiens

<400> 155
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aattcggcac gagctttttaa taggaagtaa tgtctcaccc aagagaaatg aagagcaggg     60
aagagtgact ttctccttct ccctccctct cccctggata tggaactcaa ccattatgca    120
ctgcttcttt ttgtggttgc tgctttttgg acttcttgga attagtggtt tccttggtta    180
tatttcagtg gctggtarca gtatatatgt catgtggaag gtggaraagg aaatgaatac    240
ttaggtctca aagacccact ctccatggct gctttagcag atggctgttt ctttctctcc    300
cttgcaggtt ggggatagga ttgtcaccat ctgtggcaca tccactgagg gcatgactca    360
cacccaagca gttaacctac tgaaaaatgc atctgctcc attgaaatgc aggtggttgc     420
tggaggagac gtgagtgtgg tcacaggtca tcagcaggag cctgcaagtt ccagtctttc    480
tttcactggg ctgacgtcaa gcagtatatt tcaggatgat ttaggacctc ctcaatgtaa    540
gtctattaca ctagagcgag gaccagatgg cttaggcttc agtatagttg ggaggatatg    600
ggcagccctc atgggagact tacccattta tgttaaaaca gtgttttgca aaggggagca    660
gcctctggaa gacggacgtc ttgaaaaggg gggcgattcc agatcattgc tgtcaatggg    720
cagagtctag awggagtcac ccatgaagaa gctkttgcca tccttaaacg gacaaaaggg    780
cactgtcact ttgatggttc tctcttgaat tggctgccag aattgaacca acccaacccc    840
tagctcacct cctactgtaa agagaatgca ctggtcctga caatttttat gctgtgttca    900
gccgggtctt caaaactgta ggggggaaat aacacttaag tttctttttc tcatctagaa    960
atgctttcct tactgacaac ctaacatcat ttttcttttc ttcttgcatt ttgtgaactt   1020
aaagagaagg aatatttgtg taggtgaatc tcgttttat ttgtggagat atctaatgtt     1080
ttgtagtcac atgggcaaga attattacat gctaagctgg ttagtataaa gaaagataat   1140
tctaaagcta accaaagaaa atggcttcag taaattagga tgaaaaatga aaatataaaa   1200
taaagaagaa aatctcgggg agtttaaaaa aaatgcctca atttggcaat ctacctcctc   1260
tccccacccc aaactaaaaa aaraaaaaaa ggttttctaa tgaaaatctt taaaaatact   1320
gtcagtattt taaaattttc aacagtatta taaaaacatt gcatctcccc acctctaata   1380
tgcatatata tttttcctgc taaaattggt ttctacaatt gagtaaatgg caaatcatg    1440
aagcaatgtc cctaaatttt ataaagaaat tatatttaat gcacatttca attttcattc   1500
ttattttttga cctttttgtaa aatattttca tgttgctata agtaaatgat gatgccaccc   1560
cakgttgact atggkttttc tagaaagcaa ctatgctgct aaccatagag gaacatagaa   1620
gggttccaga atctttagtg ctggtttttaa caaccgatgc aacattaaaa atgtgttagt   1680
gtgctgtgca attggttttc aattcatatt aatcttaatg acagagaaca atgtgttact   1740
aattattttg gttgtatgcc attagtaaat tgatagaaaa attaaggggga ttaacataac   1800
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142

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ttcatttcat tgccttatat taacatctta taatacaata gtttaagactaagggaaaca  1860
gatggagctg tttattgaga caactggtga ggaattatca tgtgttcatt cccattttag  1920
agcgtgaaac tcctacatta gaatatataa agtcacttta aatatctata tttgtaacag  1980
aagtagtgta cagatatttt attacagcat ttttgtgtaa atgcagaatt aaagtgaata  2040
aataagaatt ttcagtggtg cacaaat                                       2067

<210> 156
<211> 867
<212> DNA
<213> Homo sapiens

<400> 156
ggcacgagca ggtactgggt gactgcctgg ctgaggaaaa gttaactaga cacttggggga  60
aaggagatcc aagggagtaa gaggcaaaat gcctttgcat gcttttcttcctatctctttt  120
ttctttctct ccttctcact ctctcccttc cttcctttct tcctttctct ttcttttttt  180
tttctctttt cccccacctc tctgcctgcc tccttccttc cctcccctcc cctcccttcc  240
ccctccctcc ctccctccct tccttccttc cttccttcct tccttccttc cttccctccc  300
tcctctctcc ctccttccct gccttctttc cttcgttctg ccaacttgcc agaaggagcc  360
caagaaaaag cacccagatg cttcagtcaa cttcttagaa ttcttctttt ttttatgttc  420
agaaaagatg gaaattcatt tctgctaaag agaaagaaaa aattggaaga cagggtgaag  480
gtgaacaggc ccattataag aaagaaacaa aaatctatat tctgctaca aggaagcgag  540
agagagaaag agagagaaga aagaagttcc aggattctaa tgtaccaaag ggatctcctt  600
tttcttgttt tgttctgaaa atttcaccaa aagagcacag gagaacatct tggctaattc  660
attggcgatg atgtaagaaa actgagagaa atgaaagaaa tgaagaatta ctgctgcaga  720
taatatacag ccttgaggaa agaaaggctt ttaagattat agatataaag gctattgctg  780
tattctggga taaaagaaag tctgatgtca gggaagggg aagttggaaa aactggaaaa  840
agaaaaaaga aaaaaaaaa aaaaaa                                         867

<210> 157
<211> 1422
<212> DNA
<213> Homo sapiens

<400> 157
gtctccgctc ctgtgcccgg gaagatggtg ctaggtggtt gcccgaatca cgccattttt  60
taacatctct ttttgatcaa acaagaaaaa gcatttggga aatgcaaaga ggactgagaa  120
tactttggct taaattttgc ccccagaatc ttgttgtttg cctactgaag agatgaaacc  180
atggcagaag tagaatcctt atagaaacag gaccagaaac acctcccttc tccaacaaaa  240
ggttcatttt ggtggctgtc cgtttgacct gctgtgcttc agtttaattg gcttggaaag  300
gggtcagcag ggtgaaaccg aacccccagaa aacttgatga agaaatgtct tttgcccgtt  360
ttgattacgt gcatgcaaac agcgatttgc aaagaccga tgatgatgat catgatctta  420
ctggtgaatt acagacctga tgaatttata gaatgtgaag acccagtgga tcatgttgga  480
aatgcaactg catcccagga acttggttat ggttgtctca agttcggcgg tcaggcctac  540
agcgacgtgg aacacacttc agtccagtgc catgccttag atggaattga gtgtgccagt  600
cctaggacct ttctacgaga aaataaacct tgtataaagt ataccggaca ctacttcata  660
accactttac tctactcctt cttcctggga tgttttggtg tggatcgatt ctgtttggga  720
cacactggca ctgcagtagg gaagctgttg acgcttggag gacttgggat ttggtggttt  780
gttgacctta ttttgctaat tactggaggg ctgatgccaa gtgatggcag caactggtgc  840
actgtttact aaaaagagct gccatcatgg cccagggagg cgggtgaaag ctccgtcttc  900
tgaattcatc tctacaggct caaaactcct ctttgatatc agacctgatg ttattttcct  960
tcttttggag ggcatttgtt tggttaagaa ggcttctttg gactttggaa tttcaaccca  1020
gattttacct tgcagacgga atgacaagca aaaagtgttg tggggaatca aatttgttcc  1080
tttcctcatg cacaaaacat aaaggatagt ggcgagttta caagctgtgg atgggtttcc  1140
atagtcttcc tttctgtaca ttgctatatc ttcagtcctt tggagcaagt ggacctaaca  1200
agttgagcaa aatgaatatt tggatcatg ttcctcttgt gaccctgagt cttcatgcaa  1260
ggagatctga agctgaacaa tgaaaatctt cagcagaaat agaaatggcc gtggattgta  1320
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaactcg ag                      1422


<210> 158
<211> 1288
<212> DNA
<213> Homo sapiens

<400> 158
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tgctctcgcc ctctgtgctc cagccaacgt ggcctgtcac tcgtccacct gccatactgt    120
cctgactcca ggcctttgcc tgtgctatgg cctctgttgg gaccactctt gtctctcccc    180
tgctgtgtct gctaattccc actcgtgtca gtgatccatg gctgcagaac acaccactcc    240
atccatggaa aacaatcaca atcattgatt actatctctc cctgggcttc ctggggtgga    300
ctgggctcag ctgggtggtt cactttgggg cctcagcagt catgggcaga cagtggtggg    360
ggtcactgca aagacttccc tgcatctctg gcagttgatg ctggctgtca tctgagacac    420
ctacccaggg cctctccctg gggcctgggc tcctgcttag cttggttggg aggctccaag    480
accaacatcc caagaaagat gagacagaag ccagatcacc tttttgggcc tggcttcaga    540
agtcacccag catcacttct gctgcattta tttcttaaaa cacaaatatc aaaccccatc    600
tcttgatggg agggggcctc atggtttgta aacatgttct aaactccact ctgcccggcc    660
ttggctcaac gtgtctggta atgtgtgggc tgtgaggctc cccgaacgta gacctcagac    720
tgcaacgctg gccgttacag ggtctggcac acgggcccac gtcagcccca cgccacagt     780
gatggttgtt ctgtgactgt ttctggtggc ctctgctcca cactccaggc tgacgctgtg    840
ccccttccac tgggaccctc gggtggcttc catgcacttg tgccctaaat cctgctccta    900
gactaaactt catctcctgt gttctcattc tgcagcatgg ctgttaggga acctgaccat    960
ctgcagcgcg tctcgttgcc aaggtataat gtcagtgcct cccttcagtg gctcccatgt   1020
cacagaattg tcctgcagcc ctggcacatg tgtgccatgt gggagctggg gcaggtcctc   1080
tttcatcctg tggctccgag ggagggggcc gctccttccc cagtctctac cctgacttgg   1140
ccctcgtcct gcagccactc agagagcacg atggagctgg agcttagtt ttgaccaaat    1200
gcgtgtcgcc ggcttttgtg tgtgtgtgtg tgtgacagag ccagaccctg tctttaaaaa   1260
aaaaaaaaaa aaactcgagg gggggccc                                      1288


<210> 159
<211> 1152
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (668)..(668)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (745)..(745)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (1015)..(1015)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (1088)..(1088)
<223> n equals a,t,g, or c


<220>
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<221> misc_feature
<222> (1110)..(1110)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1113)..(1113)
<223> n equals a,t,g, or c

<400> 159
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acttttttgcc ccactgtaaa ttctgggtgt atcctccact gtatgctgtc accccaaggg     120
caagcactgc atctgcttag tgaaggattt attgttcgga agatacattt tccccttkag      180
cagagagtgg cgtatcctgg cagtcttcgg tgagccagtt gtaccaggat tatgaaatgc      240
agatgtttac tgtgtcattg ttgctgtcat tgctactgag gagtactgac cagaatcatc      300
tgcaactytt agttggcaga gaggaccact atggcgggta gctctttttct ttcctgccat      360
tgtggggatg attccaggcc aaagatgatg garaagtatg gaaatcatct gaaaggttga      420
agcttggcac gtgaagccat tcatgacttt gtaaggcagt tttgctgag gccagttctg       480
ccctgggagg gacggaggtg aatcctcctg agtacctgtg gtttcttac ttcctgctga       540
atttacctaa gtgcctgttg tttgcttgct gtggaggctt tctggtattt catttcaggt      600
gcagatgcct tcactttccc accraaaaaa ccccmaccaa acctaagacc ttactgcaac      660
taagtytncc aagtactttt taacccaatg ggatgaacag cctgtggtct gctcagatca      720
ccctgagtgc gtgtgagaag gcmtnggctt tgccaggaaa tccaggaagg cagggccggg      780
ctgtgttgga agctggctta gctggtgggg cagccttatt tcaattaaaa gggcattgac      840
tgggagcagc agtcctggag tttgttgcat ttcctattgc ctcaaaatg agaaaccagg       900
aaaatagcag attggagcct tcgagaaggc agtaaatggc tgtttttatt gacaaaagga      960
aaacatttta ctgccatctc actgatggca tctcactgac ttaaaatgaa ggcangttgt     1020
agtaaaaaaa aaagtctaca tttttccacc gccacgttct tatatcctgt ttgtcagcca     1080
ctgctcanaa gggcatgttg tcttgcggan tanaggcgct ctccttccct cgttttccct     1140
ataggttggg tg                                                          1152
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<210> 160
<211> 2199
<212> DNA
<213> Homo sapiens

<400> 160
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aaatcggtga ccaagaatcg gacttcttat atgcgccaca cctgcatagt gaatatcgct      120
gcctcccttc tggtcgccaa cacctggttc attgtggtcg ctgccatcca ggacaatcgc      180
tacatactct gcaagacagc ctgtgtggct gccaccttct tcatccactt cttctacctc      240
agcgtcttct tctggatgct gacactgggg cctcatgctg ttctatcgcc tggttttcat      300
tctgcatgaa acaagcaggt ccactcagaa agccattgcc ttctgtcttg gctatggctg      360
cccacttgcc atctcggtca tcacgctggg agccacccag ccccgggaag tctatacgag      420
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agcactgatc attgtggtgg tgaacataac catcactatt gtggtcatca ccaagatcct      540
gaggccttcc attggagaca gccatgcaa gcaggagaag agcagcctgt ttcagatcag       600
caagagcatt ggggtcctca caccactctt gggcctcact tggggttttg tctcaccac       660
tgtgttccca gggaccaacc ttgtgttcca tatcatattt gccatcctca atgtcttcca      720
gggattattc attttactct ttggatgcct ctgggatctg aaggtacagg aagctttgct      780
gaataagttt tcattgtcga gatggtcttc acagcactca aagtcaacat ccctgggttc      840
atccacacct gtgtttttcta tgagttctccaatatcaagg agatttaaca atttgtttgg      900
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atccagtgct tcttcgttgc tcaactaaga acaggataat ccaacctacg tgacctcccg     1020
gggacagtgg ctgtgctttt aaaaagagat gcttgcaaag caatggggaa cgtgttctcg     1080
gggcaggttt ccgggagcag atgccaaaaa gacttttca tagagaagag gctttctttt      1140
gtaaagacag aataaaaata attgttatgt ttctgtttgt tccctccccc tcccccttgt     1200
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gtgataccac atgtgtatag tatttaagtg aaactcaagc cctcaaggcc caacttctct   1260
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agataagctt tgattaaagt agtaagtaaa aggctaccta ggaaatactt cagtgaattc   1380
taagaaggaa ggaaggaaga aaggaaggaa agaagggagg gaaacaggga gaaagggaaa   1440
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tattgtaaga tttccatgtt aatgatctaa tataatcact cagtgcaaca ttgagaattt   1560
ttttttaatg gctcaaaaat ggaaactgaa agcaagtcat ggggaatgaa tactttgggc   1620
agtatcttcc tcatgtcttc ttagctaaga ggaggaaaaa aaggctgaaa aaatagggag   1680
gaaattcctt catcagaacg acttcaagtg gataacaata tttataagaa atgaatggaa   1740
ggaaatatga tcctcctgag actaactttg tatgttaagg tttgaactaa gtgaatgtat   1800
ctgcagagga agtattacaa agatatgtca ttagatccca agtgctgatt aaatttttat   1860
agtttatcag aaaagcctta tattttagtt tgttccacat tttgaaagcaaaaaatatat   1920
atttgatata cccttcaatt gccaaatttg atatgttgca ctgaagacag accctgtcat   1980
atatttaatg gcttcaagca ggtacttctc tgtgcattat agaatagatt ttaataatct   2040
tatagcattg tatattatta ttgctgttgt cactgttatt attattgtgg atactggccc   2100
ttggtgtgtt gcatagctcc ctatgtattc tctgtttcca tctttaagtt cccagaccaa   2160
tatacattaa gagttttgaa aaaaaaaaaa aaaaaaaaa                          2199


<210> 161
<211> 1761
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1207)..(1207)
<223> n equals a,t,g, or c

<400> 161
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ttatggctgg tttgatcttt gtactccaca gttgtttttag attcatcact tttgtttgtc   120
ccacatcctc tgatcccctg aggacctgcg cagtcctgct atgtgttggt tatcaggacc    180
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actctgactc accccagcag gtttttacagt ttgtgccaat ggaggtactc cttaaggggg    300
ccctgcttga ttttttgtgg gatttgaatg ctgccattgc taaaaggcat ttgcatttca     360
ttattcaaag agagagagaa gaaattatca acagcctta gttacaaaac tgaacatatg      420
ctttctgaga ttcaacttta tgatttctta taatttgccc agtatttgca tcctgttgct    480
ctattaattt aaaaacctttt tattttggggg aaaggccaac atttgcatca ttcaaagtct    540
cattaattct ggaaaaccat ccattctgat ctctagggta tatacaccca caggcataga    600
gctcttccac gtggtggaat ctatgcaatg atagatattc acactctaaa tatgaggtgt    660
gtgtatgtgt atgggtggcc acagccatgc ttacctatgc catttagttg gtcttactta    720
atctgcttaa gatttgcatc tgtgtacctt tgttcagatt agtttttttt ttccagccga    780
tttcctctta gtggctaatg ctgttagtga atttccaac taatttcctc tcattggtta     840
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caacactgat ttccgttaac acatcagtta tgaatttcag ggaattcatc tcgccagatt     960
cttgataaca tgccattcat tgcccttagg tgattgaccc tatttctta catggctcaa    1200
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ataacgggac agctttaaac caaagatcat gcttagaaca atgaaaaatt atttgttgta   1140
tctaatacac gcctgtattg tgaaaagctt catttagcaa tgatgtaata atttttaact   1200
tccaggnaaa taatctgtga atggaaagat ttttttaagat tttgagatag tgtttagtct   1260
catgttggga acacatgaat gtgatgaaca tagtgaatac taaagaaaac gcttcagact   1320
ttcagatgat ggttcagaat ttaaaatttt taatctttc taatttcttt ttttcagtgt   1380
gaaaatagca ctttaccaaa agattagcca tgaaatggtt attttgccag ttacatttag   1440
tttcttttgt atctgcaatg taatgagtta ttttatttct tctgtatttg cagtgtaatg   1500
agtttttgtg gcaaagtgta ttaagcaatt tttcattatc ttgaagttcc acaaagtgga   1560
gaatatttat attctcacat gcattttagg cacttttgat atgtgaaaat agatgtattt   1620
tctgatgcat ttggttaata aatattaatc tgaacatttt catgttcttt gctattttga   1680
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146

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attccattat agattcatga ataaagtcat tactagagaa aaaaaaaaaa aaaaaaaaaa    1740
aaaaaaaaaa aaaactcgta g                                             1761


<210> 162
<211> 1999
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (532)..(532)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1490)..(1490)
<223> n equals a,t,g, or c

<400> 162
gcacctgtga aaaggaggaa cgtcatcccc catgatattg gggacccaga tgatgaacca      60
tggctccgcg tcaatgcata tttaatccat gatactgctg attggaagga cctgaacctg     120
aagtttgtgc tgcaggttta tcgggactat tacctcacgg gtgatcaaaa cttcctgaag     180
gacatgtggc ctgtgtgtct agtaagggat gcacatgcag tggccagtgt gccaggggta     240
tggttggtgt ctgggaagag cctagctggt tgttgccttt cctcgtacc taggtcttca      300
acatcttggt ccctctctag gctgtgatgg aatctgaaat gaagtttgac aaggaccatg     360
atggactcat tgaaaatgga ggctatgcag accagaccta tgatggatgg gtgaccacag     420
gccccaggtt agcgggtagg ggtttccagg aggcctgagg tgagaaactg ggcaacaagg     480
gattgtaggg ctcaagaaag aatgactcat tgtctattac acggcatggg ancagctgga     540
gctgccagtc tgacccccaa acccatgtcc ctgatcagtg cttactgtgg agggctgtgg     600
ctggcagctg tggctgtgat ggtccagatg gctgctctgt gtggggcaca ggacatccag     660
gataagtttt cttctatcct cagccggggc caagaagcct atgagagact gctgtggaat     720
ggtgagttcg gggagcctaa gtagtcttaa ggcagctgag aggacaccag gagccttatt     780
tttctcttcc tcgactccag gccgctatta caactatgac agcagctctc ggcctcagtc     840
tcgtagtgtt atgtctgacc agtgtgctgg acagtggttc ctgaaggcct gtggtaggcg     900
agaaggagac actgaggtgt ttcctaccca acatgtggtc cgtgctctcc aaactatctt     960
tgagctgaac gtccaggcct ttgcaggagg ggccatgggg gctgtgaatg ggatgcagcc    1020
ccatggtgtc cctgataaat ccagtgtgca gtctgatgaa gtctgggtgg gtgtggtcta    1080
cgggctggca gctaccatga tccaagaggt aatgactcc ttttcccatc tctccaccat     1140
ctgtatcctg gcccagaaaa cttcctcaac caccaaattt cttcaaggca taacccaatg    1200
ccatcttgtc cgtctataaa gcctcccatt tttccctggt atgcattcca gctcctgcct    1260
tcaggcttct gtctgtgggt catagttatc tcctccactt gctgggagct ccttgaaggc    1320
aaagactcta ctgcctccat ctatccagtg gaagtggctc ttcagagggt gccaagttag    1380
tatgtatgac tgtcatctct cccaacaggg cctgacttgg gagggcttcc agacagctga    1440
aggctgctac cgtaccgtgt gggagcgcct gggtctggcc ttccagaccn cagaggcata    1500
ctgccagcag cgagtgttcc gctcactgg ctacatgcgg ccactgagca tatgggccat    1560
gcagctagcc ctgcaacagc agcagcacaa aaaggcctcc tggycaaaag tcaaacaggg    1620
cacaggacta aggacagggc ctatgtttgg accaaaggaa gccatggcaa acctgagccc    1680
agagtgagcc gtctgaactg tggragggaa gtgctaacag cccagcctcc agcctggcct    1740
ttcctccttc cctctgaacc tcctgcaacc ctgagccatc aggacaatca tacccttcc     1800
cttctctcca cccaattgtg ccagtaaatg ggggttgagg gtgacctagg cagcattaga    1860
atcacttatt tatttctttc ctcacctgtt ccctgactgc gtgaaatgtt cagggaggtc    1920
agttgatttc cccaggtaca ttatggtgt gacagacaca tgggtacaaa taaaagaccc     1980
agaaagccaa aaaaaaaaa                                                1999


<210> 163
<211> 1636
<212> DNA
```

147

<220>
<221> misc_feature
<222> (424)..(424)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (823)..(823)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (960)..(960)
<223> n equals a,t,g, or c

<400> 163
```
gaattcggca cgagttgaaa ttgaaaatca agataaaaat gttcacaatt aagctccttc      60
ttttattgt  tcctctagtt atttcctcca gaattgatca agacaattca tcatttgatt     120
ctctatctcc agagccaaaa tcaagatttg ctatgttaga cgatgtaaaa attttagcca     180
atggcctcct tcagttggga catggtctta aagactttgt ccataagacg aagggccaaa     240
ttaatgacat atttcaaaaa ctcaacatat ttgatcagtc ttttatgat ctatcgctgc      300
aaaccagtga aatcaaagar gaagaaaagg aactgagaag aactacmtat aaactacaag     360
tcaaaaatga agaggtaaag aatatgtcac ttgaactcaa ctcaaaactt gaaagcctcc     420
tagnagaaaa aattctactt caacaaaaag tgaaatattt agaagagcaa ctaactaact     480
taattcaaaa tcaacctgaa actccagaac acccagaagt aacttcactt aaaactttg      540
tagaaaaaca agataatagc atcaaagacy ttctccagac cgtggaagac caatatwaac     600
aattaaacca acagcatagt caaataaaag aratagaaaa tcagctcaga aggactagta     660
ttcaagaacc cacagaaatt tctctatctt ccaagccaag agcaccaaga actactccct     720
ttcttcagtt gaatgaaata agaaatgtaa aacatgatgg cattcctgct gaatgtacca     780
ccatttataa cagaggtgaa catacaagtg gcatgtatgc atncagaccc agcaactctc     840
aagttttca tgtctactgt gatgttatat caggtagtcc atggacatta attcaacatc      900
gaatagatgg atcacaaaac ttcaatgaaa cgtgggagaa ctacaaatat ggttttgggn     960
aggcttgatg gagaatttg gttgggccta gagaagatat actccatagt gaagcaatct     1020
aattatgttt tacgaattga gttggaagac tggaaagaca acaaacatta tattgaatat     1080
tcttttact tgggaaatca cgaaaccaac tatagctac atctagttgc gattactggc      1140
aatgtcccca atgcaatccc ggaaaacaaa gatttggtgt tttctacttg ggatcacaaa     1200
gcaaaaggac acttcaactg tccagagggt tattcaggag ctggtggtg gcatgatgag      1260
tgtggagaaa acaacctaaa tggtaaatat aacaaaccaa gagcaaaatc taagccagag     1302
aggagaagag gattatcttg gaagtctcaa aatggaaggt tatactctat aaaatcaacc     1380
aaaatgttga tccatccaac agattcagaa agctttgaat gaactgaggc aaatttaaaa     1440
ggcaataatt taaacattaa cctcattcca agttaatgtg gtctaataat ctggtattaa     1500
atccttaaga gaaagcttga gaaatagatt tttttatct taaagtcact gtctatttaa     1560
gattaaacat acaatcacat aaccttaaaa aaaaaaaaa aaaaactcga ggggggcccg     1620
gtacccaatt cgccgg                                                     1636
```

<210> 164
<211> 1392
<212> DNA
<213> Homo sapiens

<400> 164
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attcggcaga gcagaaaacc agactgcact tgctttataa aacagagctt tatttttcct      60
tcataataag cagagttgca gtgttgctgg tattgattca ctggcgtggt ggtatcagga     120
cagatgtctc tatgattaat ttttggcctg tcactcatgt ttgcatatgg ctgttgtggc     180
tccaagcatt ggaagcaaga ggacagggaa gcaacattga ctgtaccagg aactccaaaa     240
```

148

```
cagtcttcac atcttaatgg ttggacaatg ccaaatggtc actcttttct ggaagttgac    300
tggggacaag atagtggtaa ggattagatt tggccagaaa gtttctgcca cagtgagctt    360
tcctgtctaa atccttattt taactgttgt cacttaatat tcacactttg gaaggacac     420
tactgttggt tacaattatg aaaccaactt gaatactttt tagttgaaca tttcagtagt    480
cttaattatg tttaaatagg tttcacaatt tactgttttt agtttagttt ccggctcccc    540
ccaacccccca acttttgyta gagagttact ctcttaactt ttgctagaaa gtagcaaagt    600
tctctactct acatgttcag gctggctgt agaatttcgt tttttaagga aacaggaaga     660
cagaactaat tatgcaagtc ttcatttagc tttttaaaaa aacagcttta ttgagttaga    720
attgacatgc agtaaatggt acatatttaa agcgtacaat ttgttaagtt ttgacataag    780
tatacattgt gaaaacatca gtcaccacaa tcaggatact tattttaaaa aaaactttta    840
tttaggatta gtatactgat aatgtgtcca ttgtaagtgt acattttcag ttttgacaaa    900
tgtatagatt tttgtaacta ccaccaccag tcaagatgaa aacgtttcta gcactccaga    960
aagttccctt gtgtcccttc ttggtcagtt attcccacca tgctctcagg caaccacagt   1020
tctgcttcta tcactatata agtgacagaa tttttctaca gaatttcaca tagatggaat   1080
catacaatat gtactgttct gtctggcttc ttgaggtaag ccaaatgtct tttaagagtc   1140
atgcatgttt ttgcatttat tagtagttta ttcttttttt gttggtgagt agcattcatt   1200
gtatggatat attccagtct gttttattca ttcacttttt ggacattgg gttgttatca    1260
attttgggct cttttgaatt aatccctccc tccttccctc cttcccyccc tccctccttc   1320
cctccctccc tccctctctc cctccctcct tccttccctc cctccctccc tccctttttt   1380
ttttcggcac ga                                                       1392


<210> 165
<211> 717
<212> DNA
<213> Homo sapiens

<400> 165
ggcacgagct agctgccgcc acccgaacag cctgtcctgg tgccccggct ccctgccccg     60
cgcccagtca tgaccctgcg cccctcactc ctcccgctcc atctgctgct gctgctgctg    120
ctcagtgcgg cggtgtgccg ggctgaggct gggctcgaaa ccgaaagtc cgtccggacc     180
ctccaagtgg agaccctggt ggagccccca gaaccatgtg ccgagccgc tgcttttgga    240
gacacgcttc acatacacta cacgggaagc ttggtagatg gacgtattat tgacacctcc    300
ctgaccagag accctctggt tatagaactt ggccaaaagc aggtgattcc aggtctggag    360
cagagtcttc tcgacatgtg tgtgggagag aagcgaaggg caatcattcc ttctcacttg    420
gcctatggaa aacggggatt tccaccatct gtcccagcgg atgcagtggt cagtatgac     480
gtggagctga ttgcactaat ccgagccaac tactggctaa agctggtgaa gggcattttg    540
cctctggtag ggatggccat ggtgccagcc ctcctgggcc tattgggta tcacctatac     600
agaaaggcca atagacccaa agtctccaaa aagaagctca aggaagagaa acgaaacaag    660
agcaaaaaga aataataaat aataaatttt aaaaaactta aaaaaaaaaa aaaaaaa       717


<210> 166
<211> 832
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (827)..(829)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (831)..(831)
<223> n equals a,t,g, or c

<400> 166
gaattcggca cgagtatgaa actaacaaca tagaatgccc cccaaacaaa ttcctctaac     60
```

149

```
ctcactgagt ttacttgccc tattactatt ttttttttt aagatcttct gtctcttgtt    120
tttgttttat cccttacctg atgaaagtga acatttctag tggagaaaga agatcacagt    180
tctctaatat gggcattaag agaggggtac agctagaggg gaggtgaaaa cctgcctcca    240
ctggggtgaa aaacagtgtg ctgaggtttc agccagtgat tacactgggt aatcaaccag    300
tcccatgttt cacaaaggag ttgtaatgat taacagttca ggtatgctty tgaggaaatc    360
taattgagac ctttggaaaa tagcattgtt atgaatggtg tggtgttacg ccctggaggg    420
gaaaaggcta ggaaaaacat tttaactttt caagtgtatt taaattaaca tccaaatgtt    480
tcagtgtgct ttactggaga ctgcctgagt ttggaattca aatattgtaa ccaaattact    540
ccaggtttct gaactaaaat gatctattga tgtttctcaa agtatagatc acagagtaag    600
aaaagaggaa atcaagtctg gtttatgaca aactttttc catgttaaca ttggacccaa    660
agatgttamt aagagctttt tactactgtg agagraccag cgtgatgtga agacaacgaa    720
cattttaaga agtttgacta gtagacattt cgtttaagtc ttttggaggg tcttggttga    780
caacccacaa ttttattgtg gctccccagg ctgggagaac gtggaannnc na            832


<210> 167
<211> 734
<212> DNA
<213> Homo sapiens


<400> 167
ggcacgagtt aaaaacgaat tgtagttgtt tttcttcatt taaaatggat ctgttggagg     60
ttatgtgtgt atgttgtagt tttattgcag ccacaataat tttaccaaag ttttcacata    120
ggcagttagc ctttacttaa tatcaagaca agtgaaaaaa tattggcatc gatgaaaccg    180
ataacattgg cctcattgga tttctttacc cattcacagt gtaaagaagt taccttcatg    240
ctttcattgt acctgcaggc ctgtgggctt gtacagtaga taattaattt ctaaaaagaa    300
cagctgccca tttttcttcct aggttaggtt atatcttcat aatcacaaga attagtgatg    360
gcaaaataaa attttgctta tgaatctttt acattgttta tatatgatta atatcatcat    420
atatattttc tgtattaagc tcatttggct tcatttaagc tgtatactta gtcatatatc    480
tttcattagt tctatggata tgagcagatc cctttactgg agcccagtat gtgctgtgtg    540
agttagaagt cattcttgct gagaaggtga ataggtaggg atttgccttg ttttgtaagt    600
ctacaatttg ccaagagtaa ataacactgg accagctgta aaagtaaaca gtgtgtttat    660
gcattgagat actaaagcat ttaagaaaaa attaaaagat ctcttttgtt taaaaaaaaa    720
aaaaaaaaaa aaaa                                                       734


<210> 168
<211> 1209
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (1097)..(1097)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (1120)..(1120)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (1127)..(1127)
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1141)..(1141)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1161)..(1161)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1197)..(1197)
<223> n equals a,t,g, or c

<400> 168
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nccggtatgt ggccccgtct ggctagtccc gcctagcgcg cccatttcga gcccaagttt     60
ccagctcggg tttccaggct cagaattttc caggagtagg ttcttgggca gtggctgtgg    120
gagctggaat ggcgcagctg gaaggttact atttctcggc cgccttgagc tgtacctttt    180
tagtatcctg cctcctcttc tccgccttca gccgggcgtt gcgagagccc tacatggacg    240
agatcttcca cctgcctcag gcgcagcgct actgtgaggg ccatttctcc ctttcccagt    300
gggatcccat gattactaca ttacctggct tgtacctggt gtcaattgga gtgatcaaac    360
ctgccatttg gatctttgga tggtctgaac atgttgtctg ctccattggg atgctagat    420
ttgttaatct tctcttcagt gttggcaact tctatttact atatttgctt ttctgcaagg    480
tacaacccag aaacaaggct gcctcaagta tccagagagt cttgtcaaca ttaacactag    540
cagtatttcc aacactttat tttttttaact tcctttatta tacagaagca ggatctatgt    600
tttttactct ttttgcgtat ttgatgtgtc tttatggaaa tcataaaact tcagccttcc    660
ttggattttg tggcttcatg tttcggcaaa caaatatcat ctgggctgtc ttctgtgcag    720
gaaatgtcat tgcacaaaag ttaacggagg cttggaaaac tgagctacaa aagaaggaag    780
acagacttcc acctattaaa ggaccatttg cagaattcag aaaaattctt cagtttcttt    840
tggcttattc catgtccttt aaaaacttga gtatgctttt gcttctgact tggccctaca    900
tccttctggg atttctgttt tgtgcttttg tagtagttaa tggtggaatt gttattggcg    960
atcggagtag tcatgaagcc tgtcttcatt ttcctcaact attctacttt ttttcattta   1020
ctctcttttt ttcctttcct catctcctgt ctcctagcaa aattaagact tttccttttcc   1080
ttagtttggg aaacgtngaa ttctgttttt tggtggttan cttagtnctc tgtggttttt   1140
nagtttggga aattccaatt natggctcaa gaaatacttg cttagcagac caatagncca   1200
ttataattt                                                            1209
```

<210> 169
<211> 2149
<212> DNA
<213> Homo sapiens

<400> 169
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acgaggaaga gccggccgaa gcgtggcggc cacagactgt gggtaccggg tccgagggac     60
tcgcgctttt ctctccgtgc catggcgcca gcgaaagcca cgaacgtggt gcggctgcta    120
ctaggctcca cagcgctgtg gctttcgcag ctcggctccg ggacggtcgc cgcgtccaag    180
tcggtgactg cccacttggc cgcgaagtgg cccgagaccc cgctgctgct ggaggcaagt    240
gaatttatgg cagaagaaag taatgaaaaa ttttggcagt ttttggaaac tgtgcaagaa    300
ttagcaattt ataagcaaac agaatcagat tattcttatt acacttaat cctgaagaaa    360
gctggacagt ttctagacaa tttacacatc aaccttttaa agtttgcttt ctctataagg    420
gcatactccc cagctattca gatgtttcag cagattgcag ctgatgagcc accaccagat    480
ggttgtaatg catttgtggt tattcataag aagcacacct gtaaaattaa tgagattaaa    540
aagctgctga agaaagctgc ttcaaggact agaccttatc tatttaaagg agatcacaaa    600
tttcctacaa acaaagagaa cttaccagtg gtgattctct atgccgaaat gggtactaga    660
```

```
acatttagtg catttcacaa agtattgtct gaaaaagctc aaaatgagga aattctgtat      720
gttcttcgcc attatattca gaaaccaagc tcacggaaa tgtacttatc tgggtatggt      780
gtggagctag caattaagag tacagaatac aaagcactgg atgataccca agttaaaact      840
gtgactaata ctactgtaga ggatgagact gaaacaaatg aagttcaagg atttctcttt      900
gggaaactaa aagaaatata ttcagatctt agagataatc tgacagcatt ccaaaaatac      960
ctgattgaga gtaacaaaca aatgatgcct ttgaaagtct gggaactaca agatcttagt     1020
tttcaagcag cttctcaaat aatgtccgct ccagtttatg atgccattaa attaatgaaa     1080
gacatttcac agaacttccc cataaaagcc agagtccaaa tgattggtaa tgtcttaatt     1140
ggatgaatat tgtgtggagt actttttttgc caagaggatg tctcgttgaa ctgcttccat     1200
gaatactgat gttacattaa acatatattc catttcaata ggaaatacat ttgcatagct     1260
taaagagacc ggtgcatgca atgcaagtta ccacgtatta tgagaatttg ctatataaca     1320
caactttgat gcaattgtat tctggttagg gatgacagag tataaaatta gcaacaagta     1380
aaatatgagt tagcttatac taaagagata aaatatgtga caagtcgcag tgcatgggca     1440
acaatggtgt tttactgaga ggaattggag agcagtctac tagcttagca taccttccta     1500
agcatagaat gattgctatg cctcttattg tcccaaacac tattttgtac atttattcat     1560
catacagatt acagaatctt caatatagt attctttaat tttgaaagta aataaatagt     1620
acatggttgg ctacaagata ccaaggattt tttggtggta ccttgaaata aaggagtttg     1680
ttccttattt acagattaag aatgaatata ttgatatgcc tctttcagtc aactttaaat     1740
gtcaagaatt tgagaagtcg tcatttatat aataaacat gaaatatata tgggtgttga     1800
taaatgtcat atctgtttag ccataatatt ttaattaatg gccgttataa aaattattag     1860
atcaaataca aataaagtaa aataacttta gtcttgatca gacagttgat tagctctatt     1920
gatgctaagt cagtataact gttcagaggt tctgatgcaa aactctgctg ttaatctgta     1980
attaagaaaa aattataaaa tatgctaaca ttgcttaatg gctaaattgt aggcttgagc     2040
atatctctaa aaccacttgg tagacaatct gtaaatgttt gttgaaatga aatatttgct     2100
aaataaatga aaaatttgcc ttaaaaaaaa aaaaaaaaaa aaaaaaaaa                  2149


<210> 170
<211> 1084
<212> DNA
<213> Homo sapiens


<400> 170
ggtttggggg catcacagac tacacccgta tgagaggatg aacttaaatg ataaattgtg       60
tgtgtgtgca tgcatgtgtg cgtgcatgtg gactgttaca ctcattggtc cttctgctgt      120
ctctctccct ctcctcagcc ctctttattc cctgggacac agaaattttt aaataaggcc      180
aattaataat cctacattgg tctcttacgt gttagagtga aaagaagatt cacatatctc      240
tcattttaaa ttgaaagcta gaaatgatta agcttagtga ggaagccatg ttgaaagctg      300
agatagtcca aaaactaggc ctcttgcacc agttagccaa gttgtgaatg caaaagaaaa      360
gtgcctggag gatatttaaa atgctgctcc agtgaacaca caaacgatag gaagcaaaa      420
tagccttatt gctgatatgg agaaagtttt aatggtctgg atagaagatc aaaccaactg      480
caacatttcc ttaagcaaaa tcctaattca gaacacagcc atagctgtct ccaattctat      540
gaagacagag cagagaggaa gctgtggaag taaagtttga aaataagagg ttgttcatga      600
ggtataagga aagaagacat ctccataaca taaaagtgta agtgaaacat caagtgcgaa      660
tacagaagct gcagcaagtt atccagaaaa tctaagatca ttgaagaagg tggctacact      720
aaacaataga ttttcaatat agacaaaaga gccttctgtt gattttaggc atctagccta      780
aaatggaaga agatgccatc taggacttta atgggtagag aggagagtt gatacctgtc      840
ttcaaagtaa agactgactc ttttgttagg ggctgttgca gctggtgaca ttaagttgaa      900
gccaatgctc attcaccatt ccagaaatcc ttgtgccctt aagaattatg ctaaatctac      960
tctgactgtg ttctacaagt agaacaacaa agcctggatg acagcatatc tgtttatagt     1020
catggtttac taaatatttt aagcccactg ttgagaccta ctgctcagaa aaaaaaactc     1080
gtag                                                                  1084


<210> 171
<211> 582
<212> DNA
<213> Homo sapiens
```

152

<220>
<221> misc_feature
<222> (20)..(20)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (27)..(27)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (49)..(49)
<223> n equals a,t,g, or c

<400> 171
ccgtttgccg gcccgcctcn tgggacntgg tggtcccccc ccgggcctnc agggattcgg   60
cmcgrgtgca tacatgccta cctatgtata tataaacaaa cattttgta aacagctcag   120
tgaggacttt ggactggcat aaatcatagg aatatgatta tgaggataca tccaattttc   180
agattgggca atgtatacag tttattatca tttctgattt tgggtagagt tagtactaag   240
aacagcattg aagaaaagca gtataacatt aaaattaga agatttaaaa tacaagagga   300
ttcataacag tcactttaa aatattgttt tggctttcta ctttggagct gtaatttaa   360
aaaaagaatg aacaggtttt tgtatgaata tgttagaatg actaattata gagcatcttt   420
caactggaat acatgtagat actaacacct ggttgtattt gatgtaattt cagtgcatac   480
agtgtgtgta atctgtatta agtgaaatac ttatgaataa agttgtttct gcattgcaaa   540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaactc ga   582

<210> 172
<211> 1046
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (483)..(483)
<223> n equals a,t,g, or c

<400> 172
agcaagttca cagtagaagg aggttgagat ctttctttta tgtgagaaat ctttgaatct   60
cattcatgcg atcagagttg tagccaattt ttgaaaacct tattttcaaa ggaaataaat   120
gattcactgt aggattcctt taaatatcaa gcatcaccag tatatgcttt gatggtatat   108
gtatataact taaagttctt tcaaaagcct gatacagaaa cgtgtcccca gtttggtagc   240
aatgtggaaa acctggctag agatgatatg gagctgtccc tcagaaagca aagccatgcc   300
tggaatccct aataggctgc ttagttgtga acctgtttga tttgccttaa gcctctatcc   360
agaaacctgc ccgcttccgt ctggttaaga agccagtggt ggatattttc tttgttaaca   420
ttagaaatgc aaacattccc ttgtcaacca agaatactca aagctacttg tattggaaat   480
ggncagaagg cctaaatcca aatttcttat tttttataat ttaccataga agttttgtga   540
ttaaattctt acttctgcca gtggaggttt atgcctgaaa gtcatggggt cctgtctgta   600
aatagaccta aagagaagtg cagtatttat tctttgtagg cataatgtgt ttgtcactga   660
caagcattca tattcatccc actagtcttt tattgcagtc ttttattgtc attttcagcc   720
ttatgttgga gagctttgct ttctcatcat gttcacattg tcttaagttt tgtgagcttc   780
tgagaaagag cttggtaaag gttaaaggg gactttgttc caccagggag catttattt   840
gggcgtctca ccctttctta atgaaagctg ttgtaagcca cctctgactt ggaaattctg   900
aaagtatgaa tatttttat atcttaattg taaaatgcca gttctccatt atttagatga   960
atagtagaac actgcaccct ttgtgcagtg tttttgtttc tctactgcat tccacccccc   1020
accaaaaaaa aaaaaaaaaa actcga   1046

153

<210> 173
<211> 558
<212> DNA
<213> Homo sapiens

<400> 173
```
ctgcaggaat tcagcacgag ytggcatgtg acaacccagg gctgcctgaa aatggatacc      60
aaatcctgta caagcgactc tacctgccag gagagtccct caccttcatg tgctacgaag     120
gctttgagct catgggtgaa gtgaccatcc gctgcatcct gggacagcca tcccactgga     180
acgggcccct gcccgtgtgt aaagtagcag aagcggcagc agagacgtcg ctggaagggg     240
ggaacatggc cctggctatc ttcatcccgg tcctcatcat ctccttactg ctggaggag     300
cctacattta catcacaaga tgtcgctact attccaacct ccgcctgcct ctgatgtact     360
cccaccccta cagccagatc accgtggaaa ccgagtttga caaccccatt tacgagacag     420
gggaaaccag agagtatgag gtttctatct aaagagagct acacttgaga aggggacttg     480
tgaactcaac cacaatctcc tcgaggggggg gccggtaccc aattcgscct atagtgagtc     540
gtattacaat taatgggc                                                  558
```

<210> 174
<211> 685
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (678)..(679)
<223> n equals a,t,g, or c

<400> 174
```
actacggctg cgagaagacg acagaagggg ggcggcgacg gaggaggagg atggaggcgg      60
tggtgttcgt cttctctctc ctcgattgtt gcgcgctcat cttcctctcg gtctacttca     120
taattacatt gtctgattta gaatgtgatt acattaatgc tagatcatgt tgctcaaaat     180
taaacaagtg ggtaattcca gaattgattg gccataccat tgtcactgta ttactgctca     240
tgtcattgca ctggttcatc ttccttctca acttacctgt tgccacttgg aatatatatc     300
gatacattat ggtgccgagt ggtaacatgg gagtgtttga tccaacagaa atacacaatc     360
gagggcagct gaagtcacac atgaaagaag ccatgatcaa gcttggttc cacttgctct     420
gcttcttcat gtatctttat agtatgatct tagctttgat aaatgactga agctggagaa     480
gccgtggttg aagtcagcct acactacagt gcacagttga ggagccagag acttcttaaa     540
tcatccttag aaccgtgacc atagcagtat atattttcct cttggaacaa aaaactattt     600
ttgctgtatt tttaccatat aaagtattta aaaaacatga aaaaaaaaaa aaaaaaaaaa     660
aaaaaaaaaa aaaaaaannna aaaaa                                         685
```

<210> 175
<211> 1669
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (587)..(587)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1634)..(1634)
<223> n equals a,t,g, or c

<220>

<400> 175

```
aggcgcttag gggctgaggc gcgatggcag gtgtcggggc tgggcctctg cgggcgatgg      60
ggcggcaggc cctgctgctt ctcgcgctgt gcgccacagg cgcccagggg ctctacttcc     120
acatcggcga gaccgagaag cgctgtttca tcgaggaaat ccccgacgag accatggtca     180
tcggtcaggc gggctgaggg tggggaggcc ctttgtaccc agctcagccc tcggcggcgc     240
tccctcctcc cgagcccagc cgggtcgctg gctcccccag tacctagcct gagggtgccc     300
cgaggacgcc aggcccctg  cctagagctc cgggccgcac gtcggagggggccgggcgga     360
gaggcggccc actagggccg gtcgtgacta tgtgtctgcc ccgcaggcaa ctatcgtacc     420
cagatgtggg ataagcagaa ggaggtcttc ctgccctcga cccctggcct gggcatgcac     480
gtggaagtga aggaccccga cggcaaggtg gtgctgtccc ggcagtacgg ctcggagggc     540
cgcttcacgt tcacctccca cacgcccggt gaccatcaaa tctgtcngca ctccaattct     600
accaggatgg ctctcttcgc tggtggcaaa ctgcgkgtgc atctcgacat ccaggttggg     660
gagcatgcca acaactaccc tgagattgct gcaaaagata agctgacgga gctacagctc     720
cgcgcccgcc agttgcttga tcaggtggaa cagattcaga agggcagga ttaccaaagg     780
gcaagtgcat atctccttgt aatttgagag ggcagttgac ctttataccc actataccta     840
ctcaagtttc tgcttgggag atcagctctg cagagaatgg aatgagaagt attggtttag     900
ataggttgtt tgtttgttgt ttttgagacg gagtttcact cttgttgccc atgctggagt     960
gcaatgccat gatcttggct cactgcaacc tccgcctccc caggctgagg caggagaatg    1020
gcgtgagctc gggaggtgga gcttgcagtg agctgagatc gtgccactgc actccagcct    1080
gggcgacaga gtgagactcc ttctaaaaaa caaaaacaaa accaaaacag tagttagggt    1140
acacacacac aaattctagt gattttcccc ccagtactæ ccttgacttt tgaaattcct    1200
gctttctcag agtttacaac atccttacca aacagccttc tccctcctta ccacaaaaaa    1260
araaaaaaaa gttctggggt tgaggggaca ctccattctt aacatcctct attatcccag    1320
cccaattccc cagctctcac tgggactagt tgtacctatc ttcattcatt tggtcccagc    1380
atgactacct gttggtgcat gagctgatct ctcctaacct aacagccaga tgctagtctc    1440
tggtactyag atgctgggct gcatcagata ggatgcacag gatcatcctg ggaagcttgt    1500
tgacatagat tcctgtgcaa cacttcagat atagtcttaa tgtagatttg tgttggggtg    1560
gtatggtagg tagaataatg ggcctaccac tgtgtaaaca tatggatatg tttacctaac    1620
atgacagaag aganttaagt tgctaatnag atgactgtna aataaatna                1669
```

<400> 176

```
ggcacgagtg gctgcagcgg ggcccgcgtg gtgcctcctg aggcggcccc cggatgaaga      60
gatctgggaa cccgggagcc gaggtaacga acagctcggt ggcagggcct gactgctgcg     120
```

```
gaggcctcgg caatattgat tttagacagg cagacttctg cgttatgacc cggctgctgg    180
gctacgtgga ccccctggat cccagctttg tggctgccgt catcaccatc accttcaatc    240
cgctctactg gaatgtggtt gcacgatggg aacacaagac ccgcaagctg agcagggcct    300
tcggatcccc ctacctggcc tgctactctc taagcrtcac catcctgctc ctgaacttcc    360
tgcgctcgca ctgcttcacg caggccatgc tgagccagcc caggatggag agcctggaca    420
cccccgcggc ctacagcctg ggcctcgcgc tcctgggact gggcgtcgtg ctcgtgctct    480
ccagcttctt tgcactgggg ttcgctggaa ctttcctagg tgattacttc gggatcctca    540
aggaggcgag agtgaccgtg ttccccttca acatcctgga caaccccatg tactggggaa    600
gcacagccaa ctacctgggc tgggccatca tgcacgccag ccccacgggc ctgctcctga    660
cggtgctggt ggccctcacc tacatartgg ctctcctata cgaagagccc ttcaccgctg    720
agatctaccg gcagaaagcc tccgggtccc acaagaggag ctgattgagc tgcaacagct    780
ttgctgaagg cctggccagc ctcctngctg ccccaagtgg caggccctgc gcaggcgag    840
aatggtgcct gctgctcagg gctgcccccg gcgtgggctg ccccagtgcc ttggaacctg    900
ctgccttggg gaccctggac gtgccgacat atggccattg agctccaacc cacacattcc    960
cattcaccaa taaaggcacc ctgaccccaa aaaaaaaaa aaaaaaaaa aaaaaaaaa    1020
aatttggggg ggggcccc    1038
```

<210> 177
<211> 921
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)..(4)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (11)..(11)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (15)..(15)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (20)..(20)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (901)..(901)
<223> n equals a,t,g, or c

<400> 177
```
gcgnggggna naggnaagcn ccccactatt gggttcaaaa gctggagctc caccgcggtg    60
gcggccgctc tagaactagt ggatcccccg ggctgcagga attcggcacg aggtctgagc    120
agataagatt aagggctggg tctgtgctca attaactcct gtgggacgg gggctgggaa    180
gagcaaagtc agcggtgcct acagtcagca ccatgctggg cctgccgtgg aagggaggtc    240
```

156

```
tgtcctgggc gctgctgctg cttctcttag gctcccagat cctgctgatc tatgcctggc    300
atttccacga gcaaagggac tgtgatgaac acaatgtcat ggctcgttac ctccctgcca    360
cagtggagtt tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac    420
tggggcacat cttgaattcc tggaaggagc aggtggagtc caagactgta ttctcaatgg    480
agctactgct ggggagaact aggtgtggga aatttgaaga cgacattgac aactgccatt    540
tccaagaaag cacagagctg aacaatactt tcacctgcttcttcaccatc agcaccaggc    600
cctggatgac tcagttcagc ctcctgaaca agacctgctt ggagggattc cactgagtga    660
aacccactca caggcttgtc catgtgctgc tcccacattc cgtggacatc agcactactc    720
tyctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatcct attttgcatg    780
tgtttgagat ctcagatcag tgttttagaa aatccacaca tcttgagcct aatcatgtag    840
tgtagatcat taaacatcag cattttaaga aaaaaaaaaa aaaaaaarct cgagggggggg    900
nccggtaccc agggcggaag a                                              921
```

<210> 178
<211> 894
<212> DNA
<213> Homo sapiens

<400> 178
```
ggcacgaggt actgccgggc tgccgggtcc ctgctctggg tacttctctg ctttcgggcg     60
tctcgtctag aagctgcagc ttggcctgtc tcacctctac acagaggggc tgctggcgcc    120
tgacggaaaa aggtccacac acccgatggc cggcccgggg tggacgctgc tgctactgct    180
gctgctgctg ctgctgctgg ggtccatggc agggtatggg ccacagaaga agttgaacct    240
gtcccataag ggcatcgggg agccatgcgg gagacacgag gagtgccaga gcaactgctg    300
taccatcaac agcctggccc cacacacgct ctgcacccct aagaccatct tcctgcagtg    360
cctgccctgg aggaagccca atgggtacag atgctgcac gactcagagt gccagagcag    420
ctgctgcgtc cgcaacaaca gcccgcagga gttgtgcacg ccccaaagcg tcttcctgca    480
gtgtgtgccc tggcgcaagc ccaacggcga cttctgcagc agccatcagg agtgtcacag    540
ccagtgctgc atccagctga gggagtacag ccccttccgc tgcattcccc ggaccgggat    600
cctggcccag tgcctgcccc tgtgatgtga gctcgaacct gggcgcgagg gaccggcctg    660
ggccctggga tgttcacgca ggaccgcgtt gcgcgggggc tggttccagc ggaagcttcc    720
cttacggttt gtgctgctgt ttctggggct ctgaaaatct gtgggaactg aaaggctgtg    780
accagcctgg tggcgcgaag tgtctgtgag aacaaatccc aggcactggg gtgtagcctg    840
attgttaaac atcaataaag ctcctggcc gactgaaaaa aaaaaaaaaa aaaa          894
```

<210> 179
<211> 442
<212> DNA
<213> Homo sapiens

<400> 179
```
ggcacgagat agaacccact gcctcctgat gaagtcccta ctgttcaccc ttgcagtttt     60
tatgctcctg gcccaattgg tctcaggtaa ttggtatgtg aaaaagtgtc taaacgacgt    120
tggaatttgc aagaagaagt gcaaacctga agagatgcat gtaaagaatg gttgggcaat    180
gtgcggcaaa caaagggact gctgtgttcc agctgacaga cgtgctaatt atcctgtttt    240
ctgtgtccag acaaagacta caagaatttc aacagtaaca gcaacaacag caacaacaac    300
tttgatgatg actactgctt cgatgtcttc gatggctcct accccgtttt ctcccactgg    360
ttgaacattc cagcctctgt ctcctgctct aggatccccg actcattaaa gcaaagaggc    420
ttaaaaaaaa aaaaaaaaa aa                                             442
```

<210> 180
<211> 582
<212> DNA
<213> Homo sapiens

<400> 180
```
ggcacgagat atttcgctgg accctagaaa agccaccacg acctgtgggc catgatgcta     60
```

157

```
ccccaatggc tgctgctgct gttccttctc ttcttctttc tcttcctcct caccaggggc    120
tcactttctc caacaaaata caaccttttg gagctcaagg agtcttgcat ccggaaccag    180
gactgcgaga ctggctgctg ccaacgtgct ccagacaatt gcgagtcgca ctgcgcggag    240
aaggggtccg agggcagtct gtgtcaaacg caggtgttct ttggccagta tagagcgtgt    300
ccctgcctgc ggaacctgac ttgtatatat tcaaagaatg agaaatggct tagcatcgcc    360
tatggccgtt gtcagaaaat tggaaggcag aagttggcta agaaaatgtt cttctagtgc    420
tccctccttc ttgctgcctc ctcctcctcc acctgctctc ctccctaccc agagctctgt    480
gttcaccctg ttccccagag cctccaccat gagtggaggg aagtggggag tgattgaaat    540
aaagagcttt ttcaatgaaa aaaaaaaaa aaaaaaaaa aa                        582


<210> 181
<211> 809
<212> DNA
<213> Homo sapiens


<400> 181
ggcacgagct cgaactctcc actgtcccca tttcctgcaa cagcatctca gagggcttga     60
ggtggctatc aggccttcca tcacagcata aagctccttc agggagagaa gagcgaaggc    120
acccaggctg gggaacagca gctcctacta tacctaccct gcccactctg tccaaccgt    180
gggcttggcc tgactttaga ctggaacccc ttagtgctcc tgttcctggt gtggagcaga    240
tccacctacc ccaggggaaa tgccaactac tttgccttca gacctgatgc tcctgtggtt    300
gggcctgcca agcctgccct cccagtgga agaagagggc cgtcttgtga aaggcctcag    360
gctgacccctt gcagcaccag cctctgaggt actgccagac tgggaagacc ctcccagcca    420
cccaacagcg tgggcccagc ccaggacaca tcagcccgac actccaaatt ctatcaagag    480
tggcatttat tctccttgtg gaggtgcggt gctccgggga gctggtgcta ttgtgttag    540
gaaggaggtc tgtccgtccg tccgtctgtc cggccggcct ggccccaaat ggggcggaa    600
gaggggcacg gcccgagtaa aaatcccggc ctattccggg tgggaatatg tacaaggcgg    660
cggggcacag gcgggggtgg gggcgggcgg ccggcggcc gcagcccca cccgagggcc    720
cccgcacctc gggccctact tgtagaatca gtacaaaata ggtgctacct aaacgttcct    780
tctacctgaa aaaaaaaaa aaaaaaaa                                       809


<210> 182
<211> 1396
<212> DNA
<213> Homo sapiens


<400> 182
aagtctcgta tcgcgcccgg gaggcgccgg agcccagcgg ctggcgccag atcaggctc     60
ctggaagaac catgtccggc agctactggt catgccaggc acacactgct gcccaagagg    120
agctgctgtt tgaattatct gtgaatgttg ggaagaggaa tgccagagct gccggctgaa    180
aattacccaa ccaagagaaa tctgcaggat ggactttctg gtcctcttct tgttctacct    240
ggcttcggtg ctgatgggtc ttgttcttat ctgcgtctgc tcgaaaaccc atagcttgaa    300
aggcctggcc aggggaggag cacagatatt ttcctgtata attccagaat gtcttcagag    360
agccrtgcat ggattgcttc attacctttt ccatacgaga aaccacacct tcattgtcct    420
gcacctggtc ttgcaaggga tggtttatac tgagtacacc tgggaagta ttggctactg    480
tcaggagctg gagttgtcct tgcattacct tcttctgccc tatctgctgc taggtgtaaa    540
cctgtttttt ttcaccctga cttgtggaac caatcctggc attataacaa aagcaaatga    600
attattattt cttcatgttt atgaatttga tgaagtgatg tttccaaaga acgtgaggtg    660
ctctacttgt gatttaagga aaccagctcg atccaagcac tgcagtgtgt gtaactggtg    720
tgtgcaccgt ttcgaccatc actgtgtttg ggtgaacaac tgcatcgggg cctggaacat    780
caggtacttc ctcatctacg tcttgacctt gacggcctcg gctgccaccg tcgccattgt    840
gagcaccact tttctggtcc acttggtggt gatgtcagat ttaaccagg agacttacat    900
cgatgacctt ggacacctcc atgttatgga cacggtcttt cttattcagt acctgttcct    960
gacttttcca cggattgtct tcatgctggg ctttgtcgtg gttctgagct cctcctgggg   1020
tggctacctg ttgtttgtcc tgtatctggc ggccaccaac cagactacta acgagtggta   1080
cagaggtgac tgggcctggt gccagcgttg tcccccttgtg gcctggcctc cgtcagcaga   1140
gccccaagtc caccggaaca ttcactccca tgggcttcgg agcaaccttc aagagatctt   1200
```

158

```
tctacctgcc tttccatgtc atgagaggaa gaaacaagaa tgacaagtgt atgactgcct    1260
ttgagctgta gttcccgttt atttacacat gtggatcctc gttttccaaa aaaaaaaaaa    1320
aaaaaaaaaa aaaaaaaaaa aaaactcgag gggggggcccg gtacccaatt cgccctggag    1380
ttcaagtaga catcaa                                                     1396


<210> 183
<211> 1886
<212> DNA
<213> Homo sapiens

<400> 183
ggcacgagcg gcacgaggga aaatagagag caacttaatt atgttaaggt tgactcaaac     60
ttttttttc atttcacaga cacttctaga ttggttctta gcagcagctc ttgctcttcc     120
taatttgtgt tccccattag catctaattt caagagcagg caaatctcat ctgttcccat     180
ccagcccagc cagggaacct ccagagttgc tttgcagta tggtgtggat cctgcagaat     240
gaggatgagc tcttccacga tccacattct tgccctttaa aaaataaagc gggtaggcag     300
cggggtggcg gtgtggggtg tgtggggcaa gagctagagc gttcctcctc agtgagtttg     360
atgaagggag aatgtaaaac ttggctgaac ttagccctcc aggaaagggt agccagaatg     420
ttgtattaat ttagtgatgt cttcaaaagg gtgtggtgga ggaggagtct cattcagaat     480
gagaagctga tcccagctcc caggaaatcg acacagttgc tggtgtgtag tggtcagcac     540
tagccgagtc cctatttgta gcttcatgct gttttttata ctgttgtgat gtaatgtaca     600
tctgtgttca cccaagctgc ctatgcaatg acttctataa agctcagttt ttaaacacag     660
tctcttacag ataaacaac agaaccagtg ccagaaagca gccttccctt acatgggcac     720
ttctgccaag catatgagtt cattgccttg aagatcaaag tcaaagagaa atggagaggg     780
tgttgaaatg atcagcgaaa attaaatgaa aatatattct tattggaagc tgatgctcta     840
ttatcaataa aggacccata gcaaagatac atagaggagt gattttttcaa gcagtcaaga    900
gcagaactac gaaggttttg agatggtgta gctgccaaag aagtcacccc tggctgtccc     960
ccatctcagt gagcctgagt tgaatgtttc ccaatgtcat atcccacagg gggatactta    1020
gtgcccacag catgtgatcg gtagctgata aggaagcatt ggaccagaat gtcatggaag    1080
aaacaaaagc ccacttatct tccgcggcaa tatgtttatg aacatgtgaa tcattgttca    1140
tataactgtc tcaaatactt ggctgaaaag tagactgttt ggtgttaagt ttcgacttat    1200
tttcgaggga ggatgggata tggttataca ccatatgaag gatttgtga ataaaggtt     1260
tcaaaatatt ttgggaatag tagttcggca tttatttttt ttcccagtca catttcatga    1320
gcaacaattt tatgtttaag gtagtatctg actaacctac tgatgctgtc tattcattcc    1380
attagcatac ttatgccatg ggtaaaagca atccatctag aactctttca accatttttt    1440
agtttgtctt tgcacactct agatagcatt tctgaaatca tctgcaggaa cagagttcct    1500
gaaaagagca atggtctaga gcaggctttc tcagacttca gtgtgcacca gagtcaccca    1560
ggatcttgtt aaaatgctga ttctgaggcc aggcgcggtg gctcacgcct gtaatcccag    1620
cactttagga ggctgaggcg ggcggatcac ggggtcagga gagcgagacc tcctggcta    1680
acagcatgag accctgtctc tactaaaaat acgaaaaatt agccaggcat ggtggcaggc    1740
acctgtagtc ccagctactc aggaggctga ggcaggagaa tggtgtgaac ctgggaggtg    1800
gagcttgcag tgagccgaga tcgcgccact gcactccagc ctgggggaca gagcgagact    1860
ccacctccaa aaaaaaaaa aaaaaa                                          1886


<210> 184
<211> 2971
<212> DNA
<213> Homo sapiens

<400> 184
gacgtgagga gcgttccatt tggccagtgg tgggcggttg ccacagctgg tttagggccc     60
cgaccactgg ggccccttgt caggaggaga cagcctcccg gcccgggagg acaagtcgc     120
tgccaccttt ggctgccgac gtgattccct gggacggtcc gtttcctgcc gtcagctgcc     180
ggccgagttg ggtctccgtg gttcaggccg ctccccctt cctggtctcc cttctcccgc     240
tgggccggtt tatcgggagg agattgtctt ccaggctag caattggact tttgatgatg     300
tttgacccag cggcaggaat agcaggcaac gtgatttcaa agctgggctc agcctctgtt     360
tcttctctcg tgtaatcgca aaacccattt tggagcagga attccaatca tgtctgtgat    420
```

159

```
ggtggtgaga aagaaggtga cacggaaatg ggagaaactc ccaggcagga acaccttttg      480
ctgtgatggc cgcgtcatga tggcccggca aaagggcatt ttctactga cccttttcct      540
catcctgggg acatgtacac tcttcttcgc ctttgagtgc cgctacctgg ctgttcagct      600
gtctcctgcc atccctgtat ttgctgccat gctcttcctt ttctccatgg ctacactgtt      660
gaggaccagc ttcagtgacc ctggagtgat tcctcgggcg ctaccagatg aagcagcttt      720
catagaaatg gagatagaag ctaccaatgg tgcggtgccc cagggccagc gaccaccgcc      780
tcgtatcaag aatttccaga taaacaacca gattgtgaaa ctgaaatact gttacacatg      840
caagatcttc cggcctcccc gggcctccca ttgcagcatc tgtgacaact gtgtggagcg      900
cttcgaccat cactgcccct gggtgggggaa ttgtgttgga agaggaact accgctactt      960
ctacctcttc atcctttctc tctccctcct cacaatctat gtcttcgcct tcaacatcgt     1020
ctatgtggcc ctcaaatctt tgaaaattgg cttcttggag acattgaaag aaactcctgg     1080
aactgttcta gaagtcctca tttgcttctt tacactctgg tccgtcgtgg gactgactgg     1140
atttcatact ttcctcgtgg ctctcaacca gacaaccaat gaagacatca aaggatcatg     1200
gacagggaag aatcgcgtcc agaatcccta cagccatggc aatattgtga gaactgctg     1260
tgaagtgctg tgtggcccct gcccccccag tgtgctggat cgaaggggta ttttgccact     1320
ggaggaaagt ggaagtcgac ctcccagtac tcaagagacc agtagcagcc tcttgccaca     1380
gagcccagcc cccacagaac acctgaactc aaatgagatg ccggaggaca gcagcactcc     1440
cgaagagatg ccacctccag agcccccaga gccaccacag gaggcagctg aagctgagaa     1500
gtagcctatc tatggaagag acttttgttt gtgtttaatt agggctatga gagatttcag     1560
gtgagaagtt aaacctgaga cagagagcaa gtaagctgtc ccttttaact gtttttcttt     1620
ggtctttagt cacccagttg cacactggca tttttcttgct gcaagctttt ttaaatttct     1680
gaactcaagg cagtggcaga agatgtcagt cacctctgat aactggaaaa atgggtctct     1740
tgggccctgg cactggttct ccatggcctc agccacaggg tcccccttgga cccccctctct     1800
tccctccaga tcccagccct cctgcttggg gtcactggtc tcattctggg gctaaaagtt     1860
tttgagactg gctcaaatcc tcccaagctg ctgcacgtgc tgagtccaga ggcagtcaca     1920
gagacctctg gccaggggat cctaactggg ttcttggggt cttcaggact gaagaggagg     1980
gagagtgggg tcagaagatt ctcctggcca ccaagtgcca gcattgccca caaatccttt     2040
taggaatggg acaggtacct tccacttgtt gtatttatta gtgtagcttc tcctttgtct     2100
cccatccact ctgacaccta agccccactc ttttcccatt agatatatgt aagtagttgt     2160
agtagagata ataattgaca tttctcgtag actacccaga aacttttta atacctgtgc     2220
cattctcaat aagaatttat gagatgccag cggcatagcc cttcacactc tctgtctcat     2280
ctctcctcct ttctcattag cccctttttaa tttgtttttc cttttgactc ctgctcccat     2340
taggagcagg aatggcagta ataaaagtct gcactttggt catttctttt cctagagga     2400
agcctgagtg ctcacttaaa cactatcccc tcagactccc tgtgtgaggc ctgcagaggc     2460
cctgaatgca caaatgggaa accaaggcac agagaggctc tcctctcctc tcctctcccc     2520
cgatgtaccc tcaaaaaaaa aaaaaatgct aaccagttct tccattaagc ctcggctgag     2580
tgagggaaag cccagcactg ctgccctctc gggtaactca ccctaaggcc tcggcccacc     2640
tctggctatg gtaaccacac tgggggcttc ctccaagccc cgctcttcca gcacttccac     2700
cggcagagtc ccagagccac ttcaccctgg gggtgggctg tggcccccag tcagctctgc     2760
tcaggacctg ctctatttca gggaagaaga tttatgtatt atatgtggt atatttccta     2820
gagcacctgt gttttcctct ttctaagcca gggtcctgtc tggatgactt atgcggtggg     2880
ggagtgtaaa ccggaacttt tcatctattt gaaggcgatt aaactgtgtc taatgcaaaa     2940
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa a                                     2971
```

<210> 185
<211> 1337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1337)..(1337)
<223> n equals a,t,g, or c

<400> 185
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cttccggttc tccgggcagc tgccactgct gtagcttctg ccacctgcca cgaccgggcc      60
tctccctggc gtttggtcac ctctgcttca ttctccaccg cgctatggt ccctcttgga     120
```

160

```
gccagcgtgg cgggcctggc ggctcccggg tggtgagaga gcggtccggg aacgatgaag    180
gcctcgcagt gctgctgctg tctcagccac ctcttggctt ccgtcctcct cctgctgttg    240
ctgcctgaac taagcgggyc cctggmagtc ctgctgcagg cagccgaggc cgcgccaggt    300
cttgggcctc ctgaccctag accacggaca ttaccgccgc tgccaccggg ccctacccct    360
gcccagcagc cgggccgtgg tctggctgaa gctgcggggc cgcggggctc cgagggaggc    420
aatggcagca accctgtggc cgggcttgag acggacgatc acggagggaa ggccgggg aa    480
ggctcggtgg gtggcggcct tgctgtgagc cccaacc¢g gcgacaagcc catgacccag    540
cgggccctga ccgtgttgat ggtggtgagc ggcgcggtgc tggtgtactt cgtggtcagg    600
acggtcagga tgagaagaag aaaccgaaag actaggagat atggagtttt ggacactaac    660
atagaaaata tggaattgac acctttagaa caggatgatg aggatgatga caacacgttg    720
tttgatgcca atcatcctcg aagataagaa tgtgcctttt gatgaaagaa ctttatcttt    780
ctacaatgaa gagtggaatt tctatgttta aggaataaga agccactata tcaatgttgg    840
gggggtattt aagttacata tattttaaca acctttaatt tgctgttgca ataaataccg    900
tatccttta ttatatcttt atatgtatag aₐgtactctr ttaatgggct cagagatgtt    960
ggggataaag tatactgtaa taatttatct gtttgaaaat tactataaaa cggtgttttc   1020
tgatcggttt ttgtttcctg cttaccatat gattgtaaat tgttttatgt attaatcagt   1080
taatgctaat tatttttgct gatgtcatat gttaaagagc tataaattcc aacaaccaac   1140
tggtgtgtaa aaataattta aaatttcctt tactgaaagg tatttcccat ttttgtgggg   1200
aaaagaagcc aaatttatta ctttgtgttg gggttttaa aatattaaga aatgtctaag   1260
ttattgtttg caaaacaata aatatgattt taaattctct taaaaaaaaa aaaaaaaacc   1320
ccggggggggg gcccggn                                                  1337

<210> 186
<211> 1129
<212> DNA
<213> Homo sapiens

<400> 186
gctgcttccc aaggaccatg aaactcctgc tgctggctct tcctatgctt gtgctcctac     60
cccaagtgat cccagcctat agtggtgaaa aaaaatgctg gaacagatca gggcactgca    120
ggaaacaatg caaagatgga gaagcagtga aagatacatg caaaaatctt cgagcttgct    180
gcattccatc caatgaagac cacaggcgag ttcctgcgac atctcccaca cccttgagtg    240
actcaacacc aggaattatt gatgatattt taacagtaag gttcacgaca gactactttg    300
aagtaagcag caagaaagat atggttₗgaag agtctgaggc gggaaggggga actgagacct    360
ctcttccaaa tgttcaccat agctcatgac ttcctctcgg ctatcactca cccctgtcct    420
cagagtgata aactaagtca catacagata aagcactgaa aacaccacag tgaccctccc    480
acccccacc aatatgtaat tctattaata gaaacagctg tgtaaagaag tctaaₐₐtt    540
tcactatttc caatgataaa ctcttcagtg ctcttcttga aatgtcacat tatttcccaa    600
caagttatac ctatttttag tattcttgtt gctagtgcca tgcacaactt caatagctag    660
ttgctattcc aacaacaatt tcttcatgta tcgttctgtc ttctcaacag ctgtctttca    720
tggcagcata agtggtcatg atcaaaattc taaatcttgc atctgtgaga gtagctacta    780
tgacactaaa agctttttttt ctagaacagg agacacttca ggtgaagcat tcattctcct    840
actaactatg gccttggagc caggttttat ctctcactgt aggaaattgg ccgcccccagg    900
tgtgagctat gaagactcct ttttgcccca gtggctttgg ggttgaaatg ₜgtcgaaaa     960
gcttttatgg ctctgtagac ccatcttttt gaccaagcct tgatcacaca tggacatcca   1020
agggtaatca tggaccccca attgtgggtg aaaggatgga tcatttatct acctgattac   1080
tgagagcttt atttgtctcc ctctgatagc aaaaaaaaaa aaaaaaaa                 1129

<210> 187
<211> 799
<212> DNA
<213> Homo sapiens

<400> 187
ggagacggtg ggtgaccaga gagtcctgtc tatcctagga ggagaacatt cagcccaaat     60
cccagcccca tcatgcacag atcagagcca tttctgaaaa tgtcgctgct gattctgctt    120
ttcctgggat tggcagaagc ctgtactcct cgtgaagtca acttgctgaa ₐggatcata    180
```

161

```
ggtctcatga gcagactgtc accggatgag atcctaggct tgctgagcct ccaagtactg      240
catgaagaaa caagtggctg caaggaggaa gttaaaccct tctcaggcac caccccatcc      300
aggaaaccac tccccaagag gaagaacacg tggaacttcc tgaaatgcgc ctacatggtg      360
atgacctacc tcttcgtatc ctacaacaaa ggggactggt tcacttttc ctcccaagtg       420
ttactgccac tactgtaact tggaactgga catcaggat gatccctgct gttctttcta        480
gtgagcctgc tccatctcag cttagccttc acaaggcctc catctcccag gcattctaac       540
ctctgaagaa agctctctgt cccctggact gcctgtgtgg agggtatga actgggtcct        600
ttaaggaatg gcacctgggt gcccagaggc atggccagaa ggtgtctgtg ggggccatgc       660
cttaggggga tgcacccagg gcggctgaga gagcaactgc aggagtttcc cctaaaatct       720
ctcctccaga tcgttctcga actttcccca ctacttccat aataaaatgt atacttgttg       780
aaaaaaaaaa aaaaaaaaa                                                    799

<210> 188
<211> 1689
<212> DNA
<213> Homo sapiens

<400> 188
actatagaag tcgcctgcag taccggctcc ggaattaagg gtcgacccac gcgtccgggc       60
taattgtttg gtcagaaatt cctaaggcca cagctttggg gggttgtgt agatgtacat       120
ggtgggtggg ttataaatat tgggacttaa ggcagcttgt tctatgtatt tatctttgct      180
cttgggtgac ttagggaatg atttttatttg atttaacctt ctttctgttt gccccgagaa     240
tactcgccag tggcgcttgc agttgtagca tttaccccaa gataactttg cctacgaaat       300
atttcgcttt tattatttyc acatcattct agtatatgga ctttggaaac aaaagacatt      360
gttctattta tagcattctt ttttttttt tagtagcggt atttccattt acaaaatata       420
gtaactcttg attactgaaa atgtcaaatc ctagaaacg tagcatgcct atacatgatg       480
ttaacatcat tctcgaacag ttgttggccg aagattcatt tgatgaatcc aattttttg      540
aaatagacaa ttctgatgtt ctctttagaa ataactcagt ttttatcttt tttcacattg      600
aaaatcagtt agatttgctt aagcctcaaa gagaatgttt atgtaaatta gcgctggcaa      660
tttttttttt tctaaacagg aaaagggtta aatgaaggtt gataaaatgg atgttcaatt      720
gtctttctga aagtgagtgg cttgaaggga tgaataaata ttttcttaat atattcaaaa      780
aagtgcattg cttctgtga tggaagttaa gacctaaatg tctggaagtt gtaaccctca       840
acacagcttt tcctgatttg ctgcaaaggc acatagctga ttatagaagt gaagacggca      900
aggacgggga ctccaacaaa ggaaaccctg ttgaaggatt tgggaacttt catgcttcag      960
atgaaattca ggcatgtgag catcactgca gaatgtggtg catcattgcc atcatgagta     1020
atcacttgct gctcctactt ctgagaccaa gactcttttg tcatattctt tagcaatagg     1080
acgggtaaag actggattta attgctgttc agagtataaa aactcaattg attccaacat     1104
atctgaatgt gcagtaaagt cttaaaagtc aaccgttaat cattaagtct tttgcctcta     1200
aagtcttttg cctctgaaga agtttattac atgagttgat tttcatattt tcattttggt     1260
ggggttttcc tgttgttggg caaggtgggg tcacaggaca tgggactagt aagcatttta     1320
ctgtttacta tatttgtctt tttataaaca gtatctccca aaatgtgatt agaaggctac     1380
caagcctgta tttggacatt taattgtgtg ctttatataa tgtaactact aacagtattt     1440
ggactgcctg ttcattcctg gagacaaaaa tgaaatctg tcagttcaag ttcttgggta      1500
acatcaagtc attagaattt atctaaagct tatcatgatt tgataagaca tccattgcat     1560
gcagctgttt tagctcagtg caaaacactg aaattgtgat tcttagactg tttctgagac     1620
atttggatgg aaataaatgt ataaatgtta aaaaaaaaa aaaaaaaaa aaaaaaaaa        1680
agggcggcc                                                            1689

<210> 189
<211> 420
<212> DNA
<213> Homo sapiens

<400> 189
ggcacgagag agagcagagc tatacatagc tatccaggtc taacttcacg aagaatagaa       60
tggtttcttt tcattttcaa tgtacatcat actttgtcag actttttttt cagttgcagc      120
tcttcgttgg actggtgata gtattggctt tattaatctc tcattctctc acttattcat      180
```

162

```
tccacaaaca tttgtagaag gccaccaagc tctagggaga ggaaaatggt tttataaatt     240
agtgctttct gggataaagg aaatttataa tctgtactac ttaatagtag ccactagcca     300
catgtggttt tcgaacaaga tttccatcac ctctccaacc actttctcct cattggtcag     360
atctagaccc cgagaaactg ttœttttcat tgttttctcc gccttctaca aactgagata     420
```

<210> 190
<211> 1090
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)..(8)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (28)..(28)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (43)..(43)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (54)..(54)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (95)..(95)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (545)..(545)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (863)..(863)
<223> n equals a,t,g, or c

<400> 190
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cattgacntc aatgggagtt tgttttgnca cccaaaatcc aagggactt tccnaaattg      60
tcgtaaccaa ctcccccca ttgaccccaa atggncggta ggcgtgtac gggtgggagg     120
tctatataag cagagctcgt ttagtgaacc gtcaagatcc gcctggagac gccatccacg     180
ctgttttgac cctccataga agacaccggg accgatccag cctccggact ctagcctagg     240
cttttgcaaa aagctatta ggtgacacta tagaaggtac gmctgcaggt accggtccgg     300
aattcccggg tcgacccacg cgtccgccag cctggaggcc cagacgtggc gcagcgactc     360
ggaggttcgc ctccagcttg cgcatcatct gcggccgggt cccgatgagc ctcctgttgc     420
ctccgctggc gctgctgctg cttctcgcgg cgcttgtggs cccagccamr gccgccactg     480
cctaccggcc ggactggaac cgtctgagcg gcctaacccgcgcccgggta gagacctgcg     540
ggggnatgac agctgaaccg cctaaaggag agkgaaggct ttcgtcacgc aggacattcc     600
attctatcac aamctggtga tgaaacacct ccctggggcc gaccctgagc tcgtgctgct     660
```

```
gggccgccgc tacgaggaac tagagcgcat cccactcagt gaaatgaccc gcgaagagat   720
caatgcgcta gtgcaggagc tcggcttcta ccgcaaggcg gcgcccgacg cgcaggtgcc   780
ccccgagtac gtgtgggcgc ccgcgaagcc cccagaggaa acttcggacc acgctgacct   840
gtaggtccgg gggcgcggcg ganctgggac ctacctgcct gagtcctgga gacagaatga   900
agcgctcagc atcccgggaa tacttctctt gctggagcc gatgcccgtc cccgggccag    960
cagggatggg gttgggggagg ttctcccaac cccactttct tccttcccca gctccactaa  1020
attccctcct gccttaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1080
aaaaaaaaaa                                                         1009
```

<210> 191
<211> 1676
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (798)..(798)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (927)..(927)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (944)..(944)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (974)..(974)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1035)..(1035)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1058)..(1058)
<223> n equals a,t,g, or c

<400> 191
```
acgagcagat tcccaagaag gtacagaagt ctttgcaaga aaccattcag tccctcaagc    60
ttaccaacca ggagctgctg aggaagggta gcagtaacaa ccaggatgtc gtctcctgtg   120
acatggcctg caagggcctg ttgcagcagg ttcagggtcc tcggctgccc tggacgcggc   180
tcctcctgtt gctgctggtc ttcgctgtag gcttcctgtg ccatgacctc cggtcacaca   240
gctccttcca ggcctccctt actggccggt tgcttcgatc atctggcttc ttacctgcta   300
gccaacaagc gtgtgccaag ctctactcct acagtctgca aggctacagc tggctggggg   360
agacactgcc gctctggggc tcccacctgc tcaccgtgg gcggcccagc ttgcagctgg   420
cctgggctca caccaatgcc acagtcagct tcctttctgc ccactgtgcc tctcaccttg   480
cgtggtttgg tgacagtctc accagtctct ctcagaggct acagatccag ctccccgatt   540
ccgtgaatca gctactccgc tatctgagag agctgcccct gcttttccac cagaatgtgc   600
tgctgccact gtggcacctc ttgcttgagg ccctggcctg ggcccaggga gcactgccat   660
gaggcatgca gaggtgaggt gacctgggac tgcatgaaga cacagctcag tgaggctgtc   720
```

```
cactggacct ggctttgcct acaggacatt acagtggctt tcttggactg ggcacttgcc        780
ctgatatccc agcagtangc cctgccttcc tggccactga tttctgcatg ggtagaccat        840
ccaagactgc agcgggtaga aggtggcagt tcttcatggg agtcttttta acttggtgcc        900
tgagttctct cctaagcaag tggccanttg cctccacctc agtncttcca tctttgggtg        960
ggggacaggg gccnagcaag catctcagcc tcctacccac aattccactg aacacttttc       1200
tggccctact gcacntggcc cccagcctcc atccttgngc tggtagcctc tcacaactcc       1080
gtccttgccc tttgccttcc acttccttcc atctcatttc taaaccccaa acagctcatc       1140
tctaaaaaga tagaactccc agcaggtggc ttctgtgttc ttctgacaaa tgattcctgc       1200
ttctccagac tttagcagct cctgatccca ttcttggtca cagctctagc cacagcagaa       1260
ggaaaggggc ttgcagaaga atatagcacc gaattgggaa acagcagcct cacctccacc       1320
tgaagcctgg gtgtggctgt cagtggacat ggggagctgg atggaaatgc ctctcacttc       1380
aaaatgccca gcctgcccca aatgcctcta agcccctccc tgtcccctcc cttgtagtcc       1440
tacttcttcc aactttccat tccccatcat gctgggggtc ttggtcacaa ggctcagctt       1500
ctctccactg tccatccctc ctatcatctg tagagcagag cacaggcagt tgtgtgcctt       1560
gggcccaggg aaccctccat caacctgaga caggactcag tatatggttc ttgggtatgc       1620
cctaccaggt ggaataaagg acacagattt gatttctaaa aaaaaaaaaa aaaaaa          1676
```

<210> 192
<211> 1569
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (341)..(341)
<223> n equals a,t,g, or c

<400> 192
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gtattggcca ggctggtctc aaactcctga cctcgtgatc cacccacctt ggcctccaa         60
agtgcagaga ttacaggcat gagccactgc acctggcctc aagaaaaatt atatatcacg        120
tggaatagga tagtagtctc tgcactgatt ttcgttgata atggctgttc ttcttatcac        180
cattttgcta tttctttgtc tgggctatta cagggttatt acagaaattt ccagaaagac        240
ccctgcctgt cgaatgttta cttcaagctt gagctcctgg tatattatga ggaaattata        300
tgatacccca ggagaggtct tccttcccca tgccattgta naattcctaa agtaaaatta        360
atttgccttc ttgtcaaaga aggagccaat gttgttttaa aattttagct tgagagatag        420
gtggggaaga aattaaatag acaagtaatc mctattcaga agagaagggagagtcattgt        480
acgaggccca agatacttgc ccaaaaatat cgcagagaaa aactagtctt tggggtccta        540
tttttgagt ggaacatttg agttatttaa aattagaatt ttattttggt cagattagaa        600
tttctagggt atgtcatatg tgtttttaaa ttgaaagctc ttaaaactcc tattgtagtt        660
taatgtcatt atccattaat ttacataaat ctgatttgga tctctatttt catcgtagac        720
tgtgtagggg caattttttcc taaaggttct gtgacatagt gctacctttt ttttaaaacc       780
tgtcttgccc aggcattatt gagtgccccc tggtgccagc atgtgtattt cacgactgta        840
tcaacaaatc atgatcatct tctctggcca ttgtgccctt tcagttcca aacttgttac         900
ctctcagtcc ttcctacaaa cttagaaagt ctaatatctt aatgtttact tatgtagcaa        960
cctccctttc tcccatccct aaatcctctt gtaattaatt attttccttt ggaactttt        1020
aaatctacaa tttccttata atatggtaac caatattaat tttcttgttc tgcgccaagt       1080
ttgattttat acaaattgtt ccagtttgg gtcatgagca caaaaccagg tatttttaaa        1140
aatctatata acccttcaat gaggcagtat taattttatt aactcattaa ttcaaccaat       1200
aattcttgat tgtttactgt gttagatatt ggggtatccc caatacctga cagctgtgag       1260
caaaacaaat gccctacaca catgaggtgt acagtccag agaaaagata aacaataagc        1320
aaattaatag ataatatgat gtccaataag gacttcaaag gaaaataaag cagagtaaag       1380
agccagagaa tgacagtgag ctgttttttca catgagtcat cagaaaaggc ctctttaaag       1440
aattgacatt tgaacagaaa aacgaatcaa gggcgtcaac tgtttattgc ttttattgct       1500
taccatttga ccaagcaatt ctacacatag gattcaccct aaaaaaaaaa aaaaaaaaaa       1560
aaactcgag                                                               1569
```

<210> 193

165

<211> 1251
<212> DNA
<213> Homo sapiens

<400> 193
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gcaccgtgga gctgcaggag atgccccttg tccaggaġt gccactgctg aagcttgggg      60
tgaattacct tccgtccatc ttcatcgctg gggtcaattt tgtgctgccg cccgtgttca     120
agctcattgc tccactggag ggctacactc ggagtcgcca gatcgttttt atcctgctca     180
ggaccgtgtt tcttcgcctc gcctccctgg tggtcctgct cttctctctc tggaatcaga     240
tcacttgtgg gggcgactcc gaggctgagg actgcaaaac ctgtggctac aattacaaac     300
aacttccgtg ctgggagact gtcctgggcc aggaaatgta caaacttctg ctctttgatc     360
tgctgactgt cttggcagtc gcgctgctca tccagtttcc tagaaagctc ctctgtggcc     420
tctgtcctgg ggcgctgggt cgtctggcgg gġacccagga gttccaggtg cccgacgagg     480
tgctggggct catctacgcg cagacggtgg tctgggtggg gagttttttc tgccctttac     540
tgcccctgct taacacggtc aagttcctgc tgcttttcta cctgaagaag cttaccctct     600
tctccacctg ctccccggct gcccgcacct tccgggcctc cgcggcgaat ttcttttttcc     660
ccttggtcct tctcctgggt ctggccatct ccagcgttcc cctgctttac agcatcttcc     720
tgatcccgcc ttctaagctt tgtggtccat tccggggggca gtcgtccatc tgggcccaga     780
tccctgagtc tatttccagc ctccctgaga ccacccagaa tttcctcttc ttcctgggga     840
cccaggcttt tgctgtgccc cttctgċga tctccagcat cctgatggcg tacactgtgg     900
ctctggctaa ctcctacgga cgcctcatct ctgagctcaa acgtcagaga sagacggagg     960
cgcagaataa agtcttcctg gcacggcgcg ctgtggcgct gacctccacc aaaccggctc    1020
tttgaccccc gcagcccacg tcccgctttc agaccccagg cccattgtaa gcctaggċa    1080
caacatctgt aaactaggag aactggagaa gactccacgc ccttccagct ttggtatctg    1140
gagatttcca gggcccctcg ccgccacgtc cctgactctc gggtgatctt ccttgtatca    1200
ataaatacag ccgaggttgc tgaraaaaaa aaaaaaaaaa aaaagtcgag c             1251
```

<210> 194
<211> 1345
<212> DNA
<213> Homo sapiens

<400> 194
```
tctacctctt gtcctccccc caacaccacc accaccctgg ctcccctccc tcatgaccgc      60
ctggatcctc ctgcctgtca gcctgtcagc gttctccatc actggcatat ggactgtgta     120
tgccatggct gtgatgaacc accatgtatg ccctgtggag aactggtcct acaacgạtc      180
ctgccctcct gaccctgctg agcaagggg tcccaagacc tgctgcaccc tggacgatgt     240
ccccctcatc agtggccctg atctgcctcc tgcgctacgg gcagctcctg gagcagagtc     300
ggcactcttg ggttaacacc acggcactca tcacaggctg caccaacgct gcgggcctct     360
tggtggttgg caactttcag gtggatcatg ccaggtctct gcactacgtt ggagctggcg     420
tggccttccc tgcggggctg ctctttgttt gcctgcactg tgctctctcc taccaagggg     480
ccaccgcccc gctggacctg gctgtggcct atctgcgaag tgtgctggct gtcatcgcct     540
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gggcagccct gtgtgagtgg gtgtgtgtca tcgatatcct cattttctat ggcaccttca     660
gctacgagtt tggggcagtc tcctcagaca cactggtggc tgcactgcag cctacccctg     720
gccgggcctg caagtcctcc gggagcagca gcacctccac ccacctcaac tgtgcccccg     780
agagcatcgc tatgạtctaa ggtctgggga gggtggctgg cccggcctcc acagcacccc     840
accccatatc ttctttccat ttattttgta ccaaaaacaa ttttgagaaa gtattctgtt     900
gggatctggg cttcctcact tctggagaag tggccatccc atgcccacct gtgccatgga     960
ggagtgggcc ctgccagctg ccacagctgc atgacctgct tcccccaccc acggtgtcgt    1020
tttgttttta aaggtcacct gtcctcactc acccagccag cccttcaggt gccttctact    1080
cccagtgcca aagccagacc actggggttt cctgctgcag gaattggggg ctgggaacag    1140
cagagggggat agaagtctgg tggaggtgga gtgggcacgc cttagctacg gaaaggccca    1200
tttctgggcc cactgagctg cactgggatt cttcactctg cccctcactt cctttagggc    1260
aaataacaca gcagaaccac gtgggtattt tagtactttt ttttatatta aaagaattct    1320
aatttgcaaa aaaaaaaaaa aaaaa                                          1345
```

166

<210> 195
<211> 1323
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1086)..(1087)
<223> n equals a,t,g, or c

<400> 195
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gctgaagatg gggtccctcg cacggcacgg tccatgtccc tcacgctggg aaagaatatg     60
cctcgccgga ggtcagcgtt gctgtggttc ctaagtttaa tgccctgaat ctgcctggcc    120
aaactcccag ctcatcatcc attccctcct taccagcctt gtcggaatca cccaatggga    180
aaggcagcct acctgtcact tcagcactgc ctgcactttt ggaaaatgga aagacaaatg    240
gggacccaga ttgtgaagcc tctgctcctg cgctgaccct gagctgcctg ggaggagctt    300
agtcaggaga ccaaggccag gatggaggaa gaagctaca gcaagggatt ccaagaaggt    360
ytaaagaaga ccaaagaact tcaagacctg aaggaggagg aggaagaaca gaagagtgag    420
agtcctgagg aacctgaaga ggtagaagaa actgaggaag aggaaaaggg cccaagaagc    480
agcaaacttg aagaattggt ccatttctta caagtcatgt atcccaaact gtgtcagcac    540
tggcaagtga tctggatgat ggctgcagtg atgctggtct tgactgttgt gctggggctc    600
tacaattcct ataactcttg tgcagagcag gctgatgggc cccttggaag atccacttgc    660
tcggcagccc cagggactcc tggtggagct caggactcca gcatgagcag cctacagagc    720
agtaggaaac ctcacaccta gccagtgccc tgctctgaga cactcagact accacccttt    780
ccccaagtat aacgtcaggc ccaagtgtgg acacactgcc gcccatccca tcaggtcatg    840
aggaagggtt cttttaacac tcggcacttc tgtgggagct attcatacac agtgacttga    900
tgttcttgga ggatcaacaa aactgccctg ggaaagcatc cagtggatga agaagtcacc    960
ttcaccaagg aactctattg gaagggaagg tctcctgccc ctagctcagg tggctgggga   1020
gaactaaaac accttcactg gtggttgggg gtaaggagcg gggcacgggg gaggaggagg   1080
tagggnncag taaaaaactt actctctttt ttcctctctg taattggtta tcaggaagaa   1140
tttgcttaat gactaacacc ctaagcatca gacctggaat ttggagttgc aaagtgacta   1200
tcttcccatt tcccatctca tttttcaataa cttcagcctc ccattctttc ctttggaatg   1260
agagtttctt tttacagaag taggaaaggc ttctcagaaa aaaaaaaaaa aaaaaaaact   1320
cga                                                                 1323
```

<210> 196
<211> 669
<212> DNA
<213> Homo sapiens

<400> 196
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cagcctcatt ttctcagtgc cccagaggtc taggatagga tttctaaact ggaatcatcc     60
ttaatcacct tgaagatccc ttaagaggca tttgactggt gctgccgtct gtgtcctcaa    120
agcaatgctg gtggcatcgt cctcgtaca catgcagagc taatacccaa actaaaaact    180
gggtaactgg ccctgaagtg cttcccaatc agtaagccac agggaaatgt ttgattttta    240
tgttctgttg gattttggtt tgcttggcat atctaaaggt gcctttactt ttctttttt    300
ttttttttct ttctgctttg ttttgtagga cttgttctaa catggaaaac aagtcagaa    360
gactctcctc tgactgttac ctttgcccca agccacccca aactttatg ctcatgtttt    420
attaaagcag gtgctccctg gaatctctgg gacatttttg aggcatttga agcagaatat    480
agagtggtct catctccttc cttaatcttc ctggtggttg ggatgttcca cttgtatcat    540
agattttttt attacagata tgctccactg tttttaaatg tgaacttgtg cgcaaatgtg    600
cagattcaat gttcttgtta cagattgaat aaattttat tttgaarawr aaaaaaaaaa    660
aaactcgag                                                           669
```

<210> 197
<211> 1271
<212> DNA

<213> Homo sapiens

<400> 197
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ggggctgggc cctgctcagg tggctctctc cttgcaggga ccggcgatgc tctgcaggct   60
gtgctggctg gtctcgtaca gcttggctgt ctgttgctc ggctgcctgc tcttcctgag  120
gaaggcggcc aagcccgcag agaccccacg gcccaccagc ctttctgggg ctcccccaac  180
accccgtcac agccggtgtc cacccaacca cacagtgtct agcgcctctc tgtccctgcc  240
tagccgtcac cgtctcttct tgacctatcg tcactgccga aatttctcta tcttgctgga  300
gccttcaggc tgttccaagg ataccttctt gctcctggcc atcaagtcac agcctggtca  360
cgtggagcga cgtgcggcta tccgcagcac gtggggcagg tgggggggag ggctagggcc  420
ggcactgaag ctggtgttcc tcctaggggt ggcaggatcc gctcccccag cccagctgct  480
ggcctatgag agtagggagt ttgatgacat cctccagtgg gacttcactg aggacttctt  540
caacctgacg ctcaaggagc tgcacctgca gcgctgggtg gtggctgcct gcccccaggc  600
ccatttcatg ctaaagggag atgacgatgt ctttgtccac gtccccaacg tgttagagtt  660
cctggatggc tgggacccag cccaggacct cctggtggga gatgtcatcc gccaagccct  720
gcccaacagg aacactaagg tcaaatactt catcccaccc tcaatgtaca gggccaccca  780
ctacccaccc tatgctggtg ggggaggata tgtcatgtcc aggccacag tgcggcgcct  840
ccaggctatc atggaagatg ctgaactctt ccccattgat gatgtctttg tgggtatgtg  900
cctgaggagg ctgggctga gccctatgca ccatgctggc ttcaagacat ttggaatccg  960
gcggcccctg accccttag acccctgcct gtataggggg ctcctgctgg ttcaccgcct 1020
cagccccctc gagatgtgga ccatgtgggc actggtgaca gatgaggggc tcaagtgtgc 1080
agctggcccc atacccagc gctgaagggt gggttgggca acagcctgag agtggactca 1140
gtgttgattc tctatcgtga tgcgaaattg atgcctgctg ctctacagaa aatgccaact 1200
tggtttttta actcctctca ccctgttagc tctgattaa aacactgcaa cccaaaaaaa 1260
aaaaaaaaaa a                                                      1271
```

<210> 198
<211> 933
<212> DNA
<213> Homo sapiens

<400> 198
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ggcacgaggt gcttccctcc cagatggctg tgtatgtatt ttcttttctt ttttgctttc   60
ttcttctttc cgttgttttg ttattgtttt aactataata agagggccag aggcagtcaa  120
gccctggcca ggtcctggcg gcccatgggg gttctgggga gggggagggg ggaagtcagt  180
gggggtcaga ggtggagggt gaagaatgag aaagttgggg agttaggctt agctcaggaa  240
ccatgtgtcc ctgcccactc ccctccttcc ttgccccctc ctacctccct gcctctacat  300
ggcttctctc caccctccc agagtcctac gggacaggac cctgctccag tggtatccaa  360
ctcctccctg cccactcttc ctcatgggcc acctcacctc ccactttcga tgtctcgcct  420
cccgtggcca ccctgcaatt agctttccaa gcccctccc gtggccgtcc cctcccaaga  480
cctctcaccc atgtagcaat ccctacatgg ctgcctgtca tgtccctact ctctaagccc  540
tcctgcccac tgttcctccc tccccgacat gctgasacca agtggtggaa accacccctc  600
agcccagcc tgccctgtgc agarttcagc tktgtgttga atgaggggga garggacaag  660
tgagggcgga gagagagttc aggaggaggc agatgcgca gggagcagag agtgagggag  720
ggagataccg aacagataga cagaaaacgt tgtacggaaa agttgttttt tcttattttt  780
tttccgggag aacccgctta cacagctctg tttgtaattt ttttcttcat gctaaaatca  840
cacggcctat ttgttgatgt aagttgcctg aattccgtgg tatgctatct tctttttaa  900
aaacaaaagc aaaaaaaaaa aaaaaaaact cga                               933
```

<210> 199
<211> 470
<212> DNA
<213> Homo sapiens

<400> 199
```
ggcacgaggg aaatcttgca cataggcagg taaataatta taaatggtga agtggattat   60
tctgagctgc ttaattttaa agggaaagag aatttaaac tcttcaacct tttatgctgc  120
```

168

```
taataagagt tccacaatca atagaaatct atcttggcag gcacttcctt ttacccacta      180
gaattttttc ccttgggagt tcacgatccc cagaaactgt gatatgagcc attcaatatt      240
gatgtactaa aacagtgctc tgcttaaata cagtttttca acatacagtc ttggaagaaa      300
caaaatccaa aataaattcc aatagtccag taacaggaat aaagacaact attgcaaatt      360
aaatcttaca gacttatatg aaagctgttg ttaacagctg ggtactagtt atttgaaaag      420
tttctcgtgc cgaattcgat atcaagctta tcgataccgt cgacctcgta              470
```

<210> 200
<211> 1020
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)..(3)
<223> n equals a,t,g, or c

<400> 200
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cgncacgagg tgaagttcaa cccaatgcaa ctttccttca gtctttccgt gaaagcgcct       60
gtgaaaaatg aggtcatatt tccctttctc agtctgcccc ttcccgtttt gctctccggt      120
tttcttcttt gtcttcacag atgtttacct atgttttttc tttgtttttg ctgttggaag      180
acatctaagt gatccttttc ccattctctt tttcactcat aaatgtcctg atgtttagca      240
aaaggcagtt ctctttgcta cttgagcttg taaactgttg ttaaatgagt aaccaaaagg      300
aaagtccttg cgaagttggt taccatttca gatacaagaa ccgtttatct tcccacgctg      360
acgaattttg cgagtgagat gattattttt ccttgtgttt gtaatttatt taagtaaatt      420
ccttgtttgt ttttcttttc agtacaccag gggtatatat tttcaatatg acatgtacct      480
ttggttcagg gctaagttag agtctgaaaa atgaagcctg taggattcat ggcagtgac       540
taattgtgat tcatcttact gattgtaggg caagaagagt ggactaactc aagacacaag      600
gcaccttcag cgaggacagc aaagggcgtc tacagagacc agccatatgg cagatactga      660
ttgtactgtc tgatgttgtg aaatagccaa tctccaccag tcctgtatac tgttcaaagt      720
aatttttttc tatgaacaat cccttttaa ataaatcaaa atgcttaaaa tctgaatgga      780
tggaacttaa aactactttg ttgaaacatc aacctgggca gaaaaaaaaa aaaaaaagac      840
atgtaaaatt ttgttatttc cagtctgtat atgaaaaaat aggtcatcaa aaggaaaaaa      900
aataactttg attaactagt gttaaacaaa aaataggttt actaaatctc ggccgaatt      960
cgatatcaag cttatcgata ccgtcgacct cgtagggggg gcccgtaccc aatcgcctgt     1020
```

<210> 201
<211> 1881
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (70)..(70)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (126)..(126)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1860)..(1860)
<223> n equals a,t,g, or c

<400> 201

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atttttcctt ttccttaaca atacctttgg ccattttttt ccagttcact atgtttgtat    60
actaactttn cttcagcctt ttaatgcgaa gcaactagta gagatgctt tcaggatctg    120
acagcnctgc tagtagagcg aagtatttat taatacagaa ttaaccttmg cccctttaaa    180
gtcaagtctg tctaatctaa ctagcgcctc gctttgcctt ctcacaatgc tcactagcca    240
tcatgctcac ccttctcttc cagatccact tcctcatgat actgtcttct aactgggctt    300
acttaaagga tgcgagcaaa atgcaggctt accaggatat caaagcaaag gaagaacagg    360
aactgcaaga tatccagtct cggtcaaaag aacaactcaa ttcttacaca taaatgtttg    420
ccagagtgtt tcggccgacg tatttacagc tctgacaaat catcagacag ctgctctgca    480
gtacagatgt gtatcccacc aaactaatgt agatgtaaa acacttcact gtctgtctca    540
agctgctggg atgtatctct aggaaaacct tccagtgggt aaatcttttt ctttagaaca    600
aatattggag gtttcatgtt agccatttta aaaggcaaca ctttgacaaa atgatcgttc    660
atactttggg aatttgtggc atgttcacat ttattgctag ggcaattcta ccaagacact    720
caatggaata tgtcacactc cttaataggg acctgtgact ccttaataag gacctgtgac    780
atgcccagca tcaagggata agaccgtaaa ttcacatata tgccatctgt cctcaagtgt    840
tatctacata ggaaataaaa tggaattgat gtaaagttcc atttctgaca gctgacattt    900
attaaacttt ggatcaaaga taatgtgatt cttatgattg atttctcaaa ctagcttttc    960
cctcccaagt ccaggaccca ttaatttcct gagccaatca gaaatatatt tttcaataat    1020
gctaaaatta gctacaattc tgctgaccct actattaaag aatctggatg ctggactcac    1080
tgacaagctt tccagaagca attttataac agatttcatt ttaacaaaat actgatccaa    1140
ttttcattat tcttgagaaa tgtcagcttt gccttaatga gtatttgctt taaatttcta    1200
agaatttata tcataactag agacccaaat atctttcaca gaattttgtt ccataaatgt    1260
ttttcttaat tattaagaag tgttacctta ttaaaatgac caccattcta aaccattttt    1320
cagtggtctg gatacgaagt ttacagtttc ataccaacta tctaaaacct aattgcaaat    1380
tgaccacaga cctctaacct cctacttta tagacttgaa tacttaagta atttaaatta    1440
gggttggtat ttcattttt tcttatctaa atcttagttt cctggaataa taaagtttga    1500
tgttcagcaa gagaactgct tgagtttaag ccattttcaa aagaaacttg ccttttaat    1560
tattgtgttc cagaacatta agtgactgta ggtactgggc attagtgatg gtaaactttg    1620
tgttgctctt tatgaaatga tccatataac tgttgggtgc atcagtgctt ttcaaagggg    1680
ctgcttacta tagggttaac tatgtatatt cattgttaag agttaacttg tggtttggct    1740
gttycctgga ttttataaca tacatgtgca gaaatgtatt caaatgaaag gaagcatacc    1800
tttatcaaga tgctattaaa attgaacatc aagtataaaa aaaaaaaaa aaaaaaattn    1860
ctgcggccga caagggaatt c                                              1881

<210> 202
<211> 1408
<212> DNA
<213> Homo sapiens

<400> 202
acgcgtccgg cggccgggtc ccgatgagcc tcctgttgcc tccgctggcg ctgctgctgc    60
ttctcgcggc gcttgtggcc ccagccacag ccgccactgc ctaccggccg gactggaacc    120
gtctgagcgg cctaacccgc gcccgggtag agacctgcgg gggatgacag ctgaaccgcc    180
taaaggaggt gagtttgaag gaagaggtcc ctagctctgt tccccctgag cctcttgggg    240
agtgggcaac atggtcccaa tgactggggc gggggagggg gaaggatccc taggctgaga    300
gtctagccta ggctgggagt ctagcctgca cctgacttgc tttatgacct cactgggctt    360
cagtgtctcg tctgtacctc gagtagactg aggtcatggt ctctgatgct tggttcctc    420
cccaggtgaa ggctttcgtc acgcaggaca ttccattcta gtatccttct gttctggggg    480
aggggaaatg ggatgggcac ctgggagaat ctccacgtaa cttcagaaag gggtggcaga    540
tggttttcaa ctgacaagtt gaattgattg ctagtggctc cagaggatt ctgaggtggt    600
ctccatgttg ggtgggcaag agagattgac tagtgatgac tgccacagaa tggagaggag    660
ggccctttac ttctttgaac cctaattttc tcacgtataa gcggagaccc tggcccctcc    720
cgggcacaga gtaagctctg agcaaaggag gcaatgctgt tccatcagt aaggctgcgg    780
aaaccaccac ctccctctgc ccaccacccc gctccttaac accactcca gtcacaacct    840
ggtgatgaaa cacctccctg gggccgaccc tgagctcgtg ctgctgggcc gccgctacga    900
ggaactagag gtgaggccgt gggaggtggg ctgggggcga ggccagaggc gaggcccagc    960
ctgctgaccc cgcccctcct ccgcctcagc gcatcccact cagtgaaatg acccgcgaag    1020
agatcaatgc gctagtgcag gagctcggct tctaccgcaa ggcggcgccc gacgcgcagg    1080
```

170

```
tgccccccga gtacgtgtgg gcgcccgcga agcccccaga ggaaacttcg gaccacgctg    1140
acctgtaggt ccggggggcgc ggcggagctg ggacctacct gcctgagtcc tggagacaga   1200
atgaagcgct cagcatcccg ggaatacttc tcttgctgagagccgatgcc cgtccccggg     1260
ccagcaggga tggggttggg gaggttctcc caaccccact ttcttccttc cccagctcca    1320
ctaaattccc tcctgcctta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1380
aaaaaaaaaa aaaaaaaaaa aaaaaaaa                                       1408
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<210> 203
<211> 2407
<212> DNA
<213> Homo sapiens

<400> 203
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gagatcggag acaagcatgg tgctgctgct tctgctgctt ctccagaaaa tccctgggac     180
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tgttgggtcc aagctgcccc tgtgctgttt ctgtcaagcc aggtgtggac attccaagtt    300
catatgcgtg aacaaaagaa aagaggaacc cagtggatgt aacagaaccg actccagttg    360
aatgtttaga ttttttgctaa actgttttct tttttccctttt tttgctgtgg tttgcattca  420
cggcagtagt tagcccaggt gtggggaacg agagtgcact gcatgatagc gttctggtga    480
gctgggaagg acccaccact gccactgagg attgttttgg aagaaaggaa tatttttatc    540
ttggggacca gctaagtctc tgcagtagtg tgaattcca aatggttgtt ttatcattgg     600
tttggtttac caaaaaaaag gcagggaaaa aaaaaaaaaa caaccgtatg agcgcattgg    660
cttgtctgcc gcaggcacag aagggtagaa agccacagca gggggcagtc cagcagactc    720
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cactgctgcg gaggaactgc cttcagagaa ggtgggggctg gaaaagggt agaagcctcc   1140
tagctgggat tgtctttgtt tcacctttct ttaaattaga attacagaag ccctgccca    1200
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tggttgtaag ataaacctgg aggagaagca cagttgtccc attgaattat ttgagcaaaa    2340
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aaaaaaa                                                              2407
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<210> 204
<211> 795
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<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (791)..(791)
<223> n equals a,t,g, or c

<400> 204
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gcttgtgggc ttccttgtca tcaactccct gggtcgccgg cctgcccaga tggctgcact   120
gctgctggca ggcatctgca tcctgctcaa tggggtgata ccccaggacc agtccattgt   180
ccgaacctct cttgctgtgc tggggaaggg ttgtctggct gcctccttca actgcatctt   240
cctgtatact gggaactgta tcccacaatg atccggcagacaggcatggg aatgggcagc   300
accatggccc gagtgggcag catcgtgagc ccactggtga gcatgactgc cgagctctac   360
ccctccatgc ctctcttcat ctacggtgct gttcctgtgg ccgccagcgc tgtcactgtc   420
ctcctgccag agaccctggg ccagccactg ccagacacgg tgcaggacct ggagagcagg   480
aaagggaaac agacgcgaca gcaacaagag caccagaagt atatggtccc actgcaggcc   540
tcagcacaag agaagaatgg actctgagga ctgagaaggg gccttacaga accctaaagg   600
gagggaaggt cctacaggtc tccggccacc cacacaagga ggaggaagag gaaatggtga   660
cccaagtgtg ggggttgtgg ttcaggaaag catcttccca ggggtccacc tccctttata   720
aaccccacca gaaccacatc attaaaaggt ttgactgcgm aaaaaaaaaa aaaaaaaaa   780
aactcgaggg ngggc   795

<210> 205
<211> 1169
<212> DNA
<213> Homo sapiens

<400> 205
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tgtatgtgct agtgtttcta tgtaatgtga ctagatgtaa atgtgttagg gcattcacaa   120
cctgggacac agagaaagtg aaatatttta tggcacactg gagtaaactg aagagggtta   180
ggggtactag agttgagtga aaaggaattt cttacatttt cctcatatta tacaattatg   240
ggaagaaaat taaaatgcag aattttaggg gagttattaa atattgaatt tgtgtacaac   300
tttcaaatga aatcttttca gttttttatg acacacttga gctcacttct agaaacatgt   360
cttagtctgt tttgtgctgc tctaacagaa tacttgagac tgggtaattt ttaacaagca   402
gagatttctt tcttacagtt ctggaggcta ggaagtccaa ggttgagggg catgcatcta   480
gcaagggcct ccttcctgcg tcatcccata gtgaagggca gaaaggcaag agaacacgct   540
tttgcatgag agagagaaag agagagaaga gaagggaagg gaagagaaag aagagaagag   600
aagagaagag aagagaagaa aagggagcca aactcatcta tttatcagga acccttctta   660
tgatagaaac ccactcccat gaaaacagga ttaatctgtt tatgaggaca gagtcctcat   720
tacctcatca sttcttaaag gtctcacttc tcagtactgc tgcattgggg attaggtttc   780
caacacatga acttcggagg acacattcaa gccgtagcat tctyccttga ctcccmaaat   840
ccatgtcctt ctcatgtcta aaatagatta atyccatccc aatwgcccca aagtcttgac   900
tcgttccagc accaactcaa aattccaaag tccagagtcc catttgaatc agacaggaga   960
gactccaggt gcaattcatc ctgaggcaaa tttctctcca gatgttagcc tatgaaaata   1020
gcaaattact ttcttccaaa atacaatggt gggacaggca taggatagac attcccattc   1080
caaaagggag aaataagcaa gaagaaaggg gtaactggtc ccaagtaagt ccaaaatcca   1140
acagaaaaaa aaaaaaaag ggcggccgc   1169

<210> 206
<211> 1088
<212> DNA
<213> Homo sapiens

<400> 206

172

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ccttccctcg gtgtgggggga tgtggccctc tcaggtgccc ctacttgctt tctgcttcct    180
tctggtgaag tccacctcca acattaacct gcccacccca cccccgtcat ccctggagaa     240
ttccagcttt gtcgtatctc agagagggaa tctaattgtt tttggggggc aaaagaaagc     300
aacgtttagg tatcacttct acttggaccg catgccttt tatagccaaa tttctgtgta      360
tttcgtaaat ggatttcgcg ttaatggata tttatgtaat aactagactt ctagattat      420
tgtgagaagg gtcaggttgg aagggggtgta ggaagagggg tgaggggtag tttttttctg    480
ttctagtttt tttttttttt ttgtcatctc tgaggtggac cttgtcacct gtggttattg     540
gggccaaggc ggactcagct cccgggggaga agggcctctc tgccatttcg gtcccaaggt    600
gagctgacac aggcgttcct tttgggactg tggaagcatc agatgccagc actgactcag     660
gaacagcaag tcaggcagaa gaggaggagg gaggctgtca ggatggaaat acctggactt     720
ttctttgctt ccctcgcaaa ctggggtctt ctctaccgaa cttcccagga tttcatctca     780
ccatatctgt gtgccgcccc cagcacccccc cacccacctc tgggggggcc gtgagcgtgt     840
gtcttcattg cctctctccc cttggcgtct gatgaccaca gcaaagcact gggaatttct      900
actcttcatg cctcatcctg cagcctcggg ttcgcattct ctctttcttt cctctttcc      960
ctctttccct gggattgact ctgagtggaa taccttggca catccactag gatctactgt    1020
ctgcactgtt ttctttgcat gactttatac gcagtaagta tgttgaaaac aaaaaaaaaa    1080
aaaaaaaa                                                              1088


<210> 207
<211> 2067
<212> DNA
<213> Homo sapiens

<400> 207
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tgtttgtcgg caagaagccc tctgttaata atggtctaaa caaataagac attgttttc     120
tccaataaag aaatccagag gcaggcagta gctggcttg attcagcctc tgactgtcac     180
tgtcagggcc ccaggcccca tgagcctttc gtctttcctg catgttggct tatcttctca     240
tgcttgtgac ttcctggttg caacacggct gctgcaacac cagacatctt gcctgtcttc     300
aaggcaggaa ggaggggggaa actatcgcct accagctatt tttcttacct tagctcctcc     360
atgtcttgga tcaaaagcat ctctttgaac ctctccctca ggcatacct gaaatgctgt      420
ggactttaac ctttttctg ttgcaaaggt cgctcacatc tcctggttg tttggtcttc      480
tcttccttgg ctctagtaac acagcagtct gttgcttcct aggacaactt ataatgggac     540
ccaaagggga aagaggattt cccgggcctc caggaagatg tctttgtgga cccactatga     600
atgtgaataa ccccttcctac ggggaatctg tgtatgggcc cagttccccg cgagttcctg    660
tggtaaggct ttctgggaga agtctggggt ggttatccgt gaggacctct cacctgatcc     720
ttatgggct ttgtaaaatc ctttcagtaa aactaacttt ttttcacgac tctgagtaca     780
ccctcattat aggaaattgg aaaatatgag aaaatcaaga ggaaaaccaa attgtccatt     840
tgattgtgag tccatttggg ggtattttct ttgtctatt aaaatctaac ttttatatgg     900
ttgagattat attgtataaa aatgtacttt tggccgggca tggtggctta tgcctgtaat     960
cccagcactt tgggaggcca aggtgggtgg attataaggt caggagttcg agatcagcct    1020
ggccgataca gtgaaacccc atctctacta aaaatatat ttaaaaaatt agccgggcgc     1080
ggtggtgcac gcctgttgtc tcagctactt gggaggctga ggtggggagaa tcgcttgaac    1140
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gagcgagact ccgtctcaaa aaaagttata ctttgktatc ttagttgaaa tcctgccatg    1260
tttccacact ctataaataa catttaaac ttttattag ggaaaatttc aaatacatat     1320
aaaagcagaa caaatagtgt aatgaacccc tgtgtaccct tcacccaact ttaataatga    1380
tcaactcatg gcgagcctgt gtccttgttt tctctttatg cctactcact cctgcccatt    1440
ctctgttgta ttattttgaa gtaaaccttg gacatctgtt catcataatc atccatctag   1500
tgtggctgtg ctacaattta cttaaccagt gttggtgttt aaccaaccta ttgcttattg    1560
gccaccccca agctttttac taatgtaaat aatgctgtaa agaatatctt tgagtaggat    1620
aattttaaga atcacttcca gatgtcaaat tacttgacta tatgacattg cctttaact     1680
taagtcttgg gaacgtttta aatatttaaa aatgttaaat ccgaggccgg gcgcggtggc    1740
tcatgcctgt aatcccagaa ctttgggagg ccgaggtggg tggatcacct gaggtcagg     1800
agctcgcaac cagcctggcc aacatggcga aaccctatct ctactaaaaa tacaaaagtt    1860
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173

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agccaggcat tgtggtgcac acctgtaatc ccacctactc gagaggctga ggcagagaa   1920
ttgcttgaac ccgggaggca gaggttgcaa tgagccgaga tcacgctact tcactccagc   1980
ctgggcaacc gcgtgagact ccatctcaaa aacaaagaa aaaaaaaaw aaaaaaaccg     2040
gcacgagggg gggcccgtac ccaatcg                                       2067


<210> 208
<211> 2213
<212> DNA
<213> Homo sapiens

<400> 208
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ggaaaagggt ggactcctat gtgacctgtt cttagagcaa gacaatcacc atctgaattc    120
cagaagccct gttcatggtt ggggatattt tctcgactgc atggaatcag aaagagcaa     180
aaggatggga aatgcctgca ttcccctgaa aagaattgct tatttcctat gtctcttatc    240
tgcgcttttg ctgactgagg·ggaagaaacc agcgaagcca aaatgccctg ccgtgtgtac     300
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tgatgttatc tcattatcct ttgtgagatc tggtttact gaaatctcag aagggagttt      420
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tgatgatgct tttattggtc ttccacatct agagtattta ttcatagaaa acaacaacat      540
caagtcaatt tcaagacata ctttccgggg actaaagtca ttaattcacttgagccttgc      600
aaacaacaat ctccagacac tcccaaaaga tattttcaaa ggcctggatt ctttaacaaa      660
tgtggacctg aggggtaatt catttaattg tgactgtaaa ctgaaatggc tagtggaatg      720
gcttggccac accaatgcaa ctgttgaaga catctactgc gaaggccccc cagaatacaa      780
gaagcgcaaa atcaatagtc tctcctcgaa ggatttcgat tgcatcatta cagaatttgc      840
aaagtctcaa gacctgcctt atcaatcatt gtccatagac acttttctt atttgaatga       900
tgagtatgta gtcatcgctc agcctttac tggaaaatgc attttccttg aatgggacca       960
tgtggaaaag accttccgga attatgacaa cattacaggc acatcactg tagtatgcaa       1020
gcctatagtc attgaaactc agctctatgt tattgtggcc cagctgtttg gtggctctca       1080
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tgttgctgac agttcaaaag ctggttttac taccatttac aaatggaacg gaaacggatt          1260
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agtcagaaca cctcagacac tcagaacgcc tcatttaatt ctgtctagta gttcccagcg         1380
tcctgtaatt tatcagtgga acaaagcaac acaattatt actaaccaaa ctgacattcc          1440
taacatggag gatgtgtacg cagtgaagca cttctcagtg aaaggggacg tgtacatttg         1500
cttgacaaga ttcattggtg attccaaagt catgaaatgg ggaggctcct cgttccagga         1560
tattcagagg atgccatcgc gaggatccat ggtgttccag cctcttcaaa taaataatta         1620
ccaatatgca attcttggaa gtgattactc ctttactcaa gtgtataact gggatgcaga         1680
gaaagccaaa tttgtgaaat ttcaggaatt aaatgttcag gcaccaagat cattcacaca         1740
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ttacaaacat gtcatagttg acttaagcgc atagacacc aaattctgtg gctgccatca         1860
gaaattttct acagtacatg acccggatga actcaatgca tgatgactct tcttatcaca         1920
cttgcaaatg aatgcctttc aaacattgag actgctagaa ccaagcacta ccagtatctc         1980
catccttaac tgtccagtcc agtgatgtgg gaagttacct tttataagac aaaatttaat         2400
tgtgtaactg ttctttgcag tgaagatgtg taaataagcg tttaatggta tctgttactc         2100
caaaaagaaa tattaatatg tacttttcca tttatttatt catgtgtaca gaaacaactg         2160
ccaaataaaa tgtttacatt ttctttcata aaaaaaaaaa aaaaaaact cga                2213


<210> 209
<211> 796
<212> DNA
<213> Homo sapiens

<400> 209
gaaaaaaaag aaaaagccaa aaaaaaaga agaagaagta ccactgctag gatttgaacc         60
cagatctagc tgactcaaga accatgccct atctctgtgt ccatgttgtc accacttaat         120
```

174

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cacttgtatt ttcccttcag gtttctctgt atgctgtgtt ctctcccaag agtggtcttc    180
caactcaccc ctattaagga agctttccca agccaggagc ttacctttcc gtgcacacat    240
tgaatgatga tcatttgtca ttctgtcttg ccttacaaaa gaggaccagc tccttgagga    300
taggaacctt gtccttatct ccctgttccc ctgtatgggg gccagctcct ggcaggtgca    360
tagtaaataa tgagtgataa acttgttgga aagaccatgc aggaaccaag caactctttt    420
cctctgcctc aatgcagtta gttcaagaac ttactaagaa aagagttgtt ggccaggcac    480
agtggcacag gcctgtaatc ccagcactgt gggagaccaa ggcaggcaaa ttgcttgagc    540
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aaagtagcca ggcatggtgg catgcacctg tggtcccagc tactttggag gctgaggtgg    660
gcgaatcact ttagyccggg gaggtcgagg atgcagtgag ctgagattgc gccactgaac    720
tccagcttgg gcgacaaaat gagaccctgt ctcaaaaaaa aaaaaaaaag aaaaaaaaa    780
aaaaaaaaaa ctcgta    796
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<210> 210
<211> 532
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (434)..(434)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (528)..(528)
<223> n equals a,t,g, or c

<400> 210
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gaggcgtaac tgtgcatatg gacaaggttt atatttctgt tcaaagtggc catccatatg    180
cttctaggct tcctttgtct ctggtatcaa gtgtatgtat gtatgtatgt atgtacttat    240
ttatttattt atttattatt ttctcttttt tctctgcccc atatgatctg caagaaaagt    300
gtcaagttta taatgagctc cccaaagcca ccatctgggt agcctcacat cttttttcatc    360
ccctgtgcct cttccctgct tttgtcctac tctagccaga ctcgtgcga agggggggcc    420
ggtamccaat tcgncctata gtgagtcgta ttacaattca ctggccgtcg tttamaaagt    480
cgtgactggg gaaaacctgg sggtacccaa cttwaatcgc cttgaagnaa at    532
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<210> 211
<211> 1575
<212> DNA
<213> Homo sapiens

<400> 211
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gtccattctt ccggtggaga tggctgcggc cgtggcgggg atgctgcgag ggggtctcct     60
gccccaggcg ggccggctgc ctaccctcca gactgtccgc tatggctcca aggctgttac    120
ccgccaccgt cgtgtgatgc actttcagcg gcagaagctg atggctgtga ctgaatatat    180
cccccccgaaa ccagccatcc acccatcatg cctgccatct cctcccgcc ccccacagga    240
ggagataggc ctcatcaggc ttctccgccg ggagatagca gcagttttcc aggacaaccg    300
aatgatagcc gtctgccaga atgtggctct gagtgcagag gacaagcttc ttatgcgaca    360
ccagctgcgg aaacacaaga tcctgatgaa grtcttcccc aaccaggtcc tgaagccctt    420
cctggaggat tccaagtacc aaaatctgct gcccctttt gtgggcaca acatgctgct    480
ggtcagtgaa gagcccaagg tcaaggagat ggtacggatc ttaaggactg tgccattcct    540
gccgctgcta ggtggctgca ttgatgacac catcctcagc aggcagggct ttatcaacta    600
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cacagcccag acccactccc tgctccagca ccagcccctc cagctgacca ccctgttgga    720
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ccagtacatc agagagcaac gcgagaagga ttctgtcatg tcggccaatg ggaagccaga    780
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tgtgtttgtc acttggtttt cactagtaat gatattgtca ggtatagggc cacttggaga    960
tgcagaggat tccatttcag atgtcagtca ccggcttcgt ccttagtttt cccaacttgg   1020
gacgtgatag gagcaaagtc tctccattct ccaggtcaa ggcagagatc ctgaaaagat   1080
agggctattg tcccctgcct ccttggtcac tgcctcttgc tgcacgggct cctgagccca   1140
ccccttggg gcacaacctg ccactgccac agtagctcaa ccaagcagtt gtgctgagaa   1200
tggcacctgg tgagagcctg ctgtgtgcca ggctttgtgc tgagtgctgt acatgtatta   1260
gttcctttac tgctgaccac attgtaccca tttcacagag aaggagcaga gaaattaagt   1320
ggcttgctca aggtcatgca gttagtaagt ggcagaacag ggacttgaac caagccctct   1380
gctctgaaga ccgcgtcctg aatttcttca ctagagcttc ctcatcaggt tacccagaag   1440
tgggtcccat ccaccatcca ggtgtgcttg gatgttagtt ctccaccctc gaggtgtacg   1500
ctgtgaaaag tttgggagca ctgctttata ataaaatgaa atatattcta maaaaaaaaa   1560
aaaaaaaaaa ykcga                                                     1575

<210> 212
<211> 1839
<212> DNA
<213> Homo sapiens

<400> 212
aattcggcac gagtgcaggt cgactctaga ggatccccgc taagaagcta gggctattgg     60
tcttcccata cacacatcag aactgaggca ccatgcaagg gggccagaga cctcatctcc    120
tcttgctgct gttggctgtc tgcctggggg cccagagccg caaccaagag gagcgtctgc    180
ttgcggacct gatgcgaaac tacgacccc acctgcggcc ggctgagcgc gactcagatg    240
tggtcaatgt cagcctgaag cttaccttga ccaacctcat ctccctgaat gaacgagagg    300
aggccctcac aactaacgtc tggatagaga tgcaatggtg cgactatcgc ctgcgctggg    360
acccaaaaga ctacgaaggc ctgtggatat tgagggtgcc atctactatg gtctggcggc    420
cagatatcgt cctggagaac aatgtggacg gtgtcttcga ggtggctctc tactgcaatg    480
tcctcgtgtc ccccgacggt tgtatctact ggctgccgcc tgccatcttc cgctcctcct    540
gctccatctc tgtcacctac ttccccttcg attggcagaa ctgttccctc atcttccaat    600
cccagactta cagcaccagt gagtcaact tgcagctgag ccaggargat gggcaagcca    660
ttgagtggat cttcattgac ccggaggctt tcacagagaa tgggragtgg sccatccggc    720
accgaccggy taaaatgctc ctggactccg tggctcctgc agagraggcg ggccaccaga    780
aggtggtgtt ctacctgctt atccagcgca agcccctctt ctacgtcatc aacataatcg    840
cccccctgtgt gctcatctcc tcagtcgcca tcctcatcta cttccttcct gctaaggcgg    900
gcggccagaa atgcacagtg gccaccaacg tgctcctggc ccagactgtc ttccttttcc    960
ttgtggctaa gaaggtgcct gagacctccc aggcagtgcc actcatcagc aagtacctga   1020
ccttcctcat ggtggtgacc atcctcatcg tcgtgaactc tgtggtcgtg ctcaatgtgt   1080
ccttgcggtc cccccacaca cactccatgg cccgtggggt ccgcaaggtg ttcctgaggc   1140
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gtggctgcgtgc ccgacgccag cagagtcact ttgacagtgg gaacgaggag tggttgctgg   1500
tgggccgagt gctggaccga gtctgcttcc tagccatgct ctccctcttc atctgtggca   1560
ctgctggcat cttcctcatg gcccactaca accaagtgcc tgacctgccg ttccccggag   1620
accccccgccc ctacctgcct ttgccagact gagccaacca atcctcctg ggccctggag   1680
tcagctatga gggccatgct gtttgtagag ctgtatcccg tgttgatgct gagtgtgctc   1740
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aactcgtag                          1839

<210> 213
<211> 1103
<212> DNA
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<213> Homo sapiens

<400> 213
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ctgatcatcc cattgtactg caaaaaccag aaaacaacca aatgtttaag tagcatttta     180
agaacagatg aatttaagtt tggacatctg caaatgaggt ggatctagca acaataactg     240
taatggactg tgacaattca atttattctt aattttgatg gttggctatt tgacttctct     300
aaaaatgaga aagagctatt ttaaaatata aagaattttc taatcagttt cagctttgca     360
ggaggtttcc tgcataaatt gggaagtaac actggaaagt aggaatttgg ttagtgaagt     420
gggaagactg tatatttata atttgcatac tacttgcaat tttttgtttt tcatcacttg     480
taataatgga atggaaatgt aagctgtaaa gactctcaaa tataaaatat ttgctacagt     540
gtatatatgg tacataattg cttgttgctt ttaaagttc ttctgttgtt ctgcttccca      600
ctgatttcat accagctcat gaatggatca ttacagtctc tccagaggct tagaatgatt     660
cagaatgttc aatgcatagt tctcaataaa caggaggcag aatttttaat gggtatttct     720
tttcagatat atgattggtc tctaggtttt tgataataat atggtcttaa attcataatt     780
actagcagag attgataatt tggaaacaat ggtagtgaat gaaactgaag ttgaaaaacg     840
gctgctactt atgtcactaa tcagaccata tgaatagcag aagttgagca atttcaaagt     900
aaaactgata tttttatttc caaaggaatt tagacatttg aaaataattg acatacatta     960
agttttaatt cgataatttc ttatatatgg atgaacaatt tttgggttta agctttttaat   1020
tcctagaaat tttatacatt aaatctcctg caatttgtca ctctggatgt tactgtttaa    1080
aaaaaaaaaa aaaaaactcg tag                                            1103
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<210> 214
<211> 1175
<212> DNA
<213> Homo sapiens

<400> 214
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ggcacgagat tgaatgttcc agataatccc tttcccagtc ctgcctgaca tctgggtagg      60
gggtttgtcc ctggaattct gggacactgg ctggggtttg aggagagaag ccagtaccta     120
cctggctgca ggatgaagct ggccagtggc ttcttggttt tgtggctcag ccttgggggt     180
ggcctggctc agagcgacac gagccctgac acggaggagt cctattcaga ctggggcctt     240
cggcacctcc ggggaagctt tgaatccgtc aatagctact tcgattcttt tctggagctg     300
ctgggaggga agaatggagt ctgtcagtac aggtgccgat atggaaaggc accaatgccc     360
agacctggct acaagcccca agagcccaat ggctgcggct cctatttcct gggtctcaag     420
gtaccagaaa gtatggactt gggcattcca gcaatgacaa agtgctgcaa ccagctggat     480
gtctgttatg acacttgcgg tgccaacaaa tatcgctgtg atgcaaaatt ccgatggtgt     540
ctccactcga tctgctctga ccttaagcgg agtctgggct ttgtctccaa agtggaagcc     600
tgtgattccc tggttgacac tgtgttcaac accgtgtgga ccttgggctg ccgccccttt     660
atgaatagtc agcgggcagc ttgcatctgt gcagaggagg agaaggaaga gttatgagga     720
agaagtgatt ccttcctggt tttgagtgac accacagctg tcagccttca agatgtcaag     780
tcttcgagtc agcgtgactc attcgttctt ccaacagttt ggacaccaca aagcagagga     840
aagggaacat ttttctacag ctggaaagtg agtcctatcc tttgaggaaa tttgaaaaaa     900
gacatggagt ggtttgaaag ctactcttca tttaagactg ctctccccaa ccaagacaca     960
tttgcctgga aattcagttc ttagcttaaa gactaaaatg caagcaaacc ctgcaattcc    1020
tggacctgat agttatattc atgagtgaaa ttgtggggag tccagccatt tgggaggcaa    1080
tgactttctg ctggcccatg tttcagttgc cagtaagctt ctcacattta ataaagtgta    1140
ctttttagaa catttggaaa aaaaaaaaaa aaaaa                               1175
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<210> 215
<211> 572
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

177

<222> (106)..(106)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (110)..(110)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (422)..(422)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (427)..(427)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (548)..(548)
<223> n equals a,t,g, or c

<400> 215
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tccttgcagc cttccatctg tgctacctcc caggaagcg aagcgncagn agtccctttc   120
ggatggcact gggagcagga aaatgaggtg attatgggct gctgctccaa gaagtattgg   180
cagctgttgc tgggggcggc tccctggggt gtcatccctt kcttgctctt gtggatggga   240
accagagcac cccacttcaa agactctgta agccagggct taccaragaa agctgaagag   300
tctagggcca attttaatca gtttcttgtg cttctcatgc caaaagagat gattgtcctc   360
actatagttc atcctatagt gcggcgggcc tgactcgcta ctgccctcta atgttctggg   420
anagaanctg ttgggtcttt cctacctaat ctggtagaaa tgtgagaaca gaggctaatt   480
tggggaaata aatctctcaa tttttttgag tgctttgtg tgtgtgcgcg cgcgcatgtg   540
tgtgtgtnag gggcagggtc tctaagaaag aa                                 572
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<210> 216
<211> 1350
<212> DNA
<213> Homo sapiens

<400> 216
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gtgacttcta tattcaatag attttttgtaa atgttaaaac atctatattt aaatgttaaa    60
acactaaata tagagagggg ctttatttca atcatagagc aacaacaaaa ataatgctta   120
tagctaaact gcctgttcta gaaagcatct gcttttttcat gttattccta aatcctcttg   180
tcatactttt gtcattgaac aatgctctcc ctctcgtctt ccatcctcat tcagaatttt   240
tagaagacca caatcgtgga gatacactac cagtattgt ttgatataat tttatttgat   300
aaacattcag tgcaggaaac tgtgatttgc tatatgttta tgtatataat cttattctgt   360
agtcatcaga atgttaatgt aaggtacatt tgatttttat tttttacatg tgtagttttc   420
tttcttcaca gtcaaagcat ttatattatt gggggtgggg gcagggaatt aagttggtgg   480
gctcgaaaat ccattcatat gtatctgtct acaaatgtct ggggataatt taaatttgaa   540
acctaagtta tatatagttt ggcaatgctc ttcttcaata tttacaataa taggatgatc   600
tacaagaaaa taagtttctt tttgcaaatt tttatcatac taaagttgtt cttttaattt   660
agcatatcta aaataggatt tagttcagtt tagctcacac aggtgtttgc tgacattcat   720
tggccattta atacagtgtt gagtggttct ccgtaaaagt ataagtgcta acactacgaa   780
gaaatgcaca cgatcattct tgctcacttc tataacaaac ttacataaaa tggatttaaa   840
aattcctact cacagcctaa aacttctgga gttcactacc ttttttttcaa attcatgata   900
agatcacctg tgtattttat attttagtaa agccaattat gaagtacaag tatcatacac   960
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178

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gtacttttga gctactatta tttgaaaaaa atctgccaaa tagcatcttt aggatatatt   1020
tacattttca ctcatctaaa aagtatacaa aaataaaaag tggaaaaagg tatcttctga   1080
atgttcaaga gcatcctata gtgccaaata ataaagcacc attttttct tcataaccag   1140
gattaaaatt catatatact gcagggcaga catacatatg atagcttgtg ctgattaatt   1200
taaccccatt tgtaaacaga tgaaaatttt attttcttat ttcatttata agatggctca   1260
atgtattggg aggcttcttt tttattacag aaagtgtata ttggtatata taaatgaac   1320
ttttcaaatg aaaaaaaaaa aaaaaaaaaa                                    1350


<210> 217
<211> 947
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (547)..(547)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (555)..(555)
<223> n equals a,t,g, or c

<400> 217
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gattgtcatt tgggtgtgta gcatttaaga tttaacagct ttctattata gagatcctac   120
agctttatat tagaagatta ttctgaagtc ataacatttt tttaaaaag taatttcaga   180
aaaaaaaaag aatgttactg ggataatgag gaatgatgtc tagctgcctg gtggtggtca   240
tcactctgcg tgcttatttt agttggttgc aggccattag aagtcaagtt gtctggtcac   300
gaatgaaacg tttacagtct gcttcaaggc aatcaggact atccattccc aggagtgaaa   360
tgtctgcatt gcatagactg caagattgga gtgataaatc acacatactt tttttatttt   420
ttttgccaag agtttgtagg ttcccattat aaagccaggc acttgattta gaatgtgtaa   480
ggcaatcctt tgggaatgct ttgggatyca gcataactct ttgaatgaac tggagctttg   540
tgaattncct ttttntcctc agatcataag gtagaaaaaattcctttta acaaaatagc   600
attcttatcc acccaccttc tgatccaggg gagtacactg ggtattgacc tcaggaaaga   660
gaacaaggga gtgagggtac aggaaatgtt aggagtgtga gcttgaagac aaagacgacc   720
caactggcaa agacagcagt tgtcaatcag agcagatgaa tcatcacatc agcaaatatt   780
cattatatat ctgctcaata ataagaaaag cttctaccaa aggccaatgc tccagacctc   840
tccccgaacc tccagattca cttacccacc tgcctacccc agcaatgtac agagcatcgc   900
ctcgtgccga attcgatatc aagcttatcg ataccgtcga cctcgag                947


<210> 218
<211> 1918
<212> DNA
<213> Homo sapiens

<400> 218
gaattcggca cgaggtagga tgagagagaa agaagaatag gagatggtta aggttggggc    60
ctggagagct gtacagatat tgatgctatt cgccaatcca ggacatgcag aaggagcatg   120
catcagcccc gggcccgcag gaaagaggga gccactcaaa ctaggataat gcacagaggg   180
tgttttcaca aaggtgtgag cgtggtgtcg gataaaggca ggactaatgc agtaacctag   240
agccagtagc agtggagtga aggagcttct cccatcaccc agccagaaga ccaggaggag   300
aacagctacc tggaccagaa ggagaggtct tgtagagaag ctcccttgag aggatcccct   360
tctgccaagg gacagccaac ctaggtggtc ttgcgggag catgacagag gagttaattc   420
cccggtttca tgttcctcct ttcctccact cctctgaggg ttactagcca aatccaccga   480
aggcagccac caagacatcc tcacagatca gcctcccagg acacacagca gggcaaagaa   540
ggtggagatg gatgggaggg gagcaaggag cagatttgga ggagtgcagc atggtcctag   600
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179

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gagagcgcca tccctgctgc ccctagctgt gtggccttgg ccaggttacc taacttctct    660
aatcctcaga gagaggttgg ggctgaatac tcaggagtct tcagtggaaa ggtggatgcc    720
atgggtgtgc tgcgatttcc tggagaaggt gtagcttaga ggggaactgg ggcaggctga    780
agagtgagag tcaggtacg aggctgggga ggagccacca cacagtcagc agtagcttcc     840
tcctctggga tcctctagca ttttctcttt aacttctcac agaagacttt acagattta     900
ttgccactgc ttccgtgtgc ctcccatcag agtgtgagca cctttgttcc tcagtccctc    960
aaggccgatg catggtcagc ccttgttagt tgagtgaatg aacaaacaac actgaagaag   1020
ctgcccttga aaaaccgggg catcgttaag ggctttgagc agaggataga agacagtgga   1080
gggggaggct cakgaggaag tgggatgtca agctgtgggg cagctgcaag accttgcatg   1140
catttggtgg aaatttcyta ggggctacca gggggcaggc tgtgcttggg actagaggct   1200
agagaggtgg ggaaggctca gtdctgtgc tcaagagaca gccctctgga cagagcacgg    1260
cagctcctcc atgacacagc tgtccacaag cttcggagca cagctccttg ttagtgagtg   1320
gtggtgttag gcaggtgggg aggtggggga agttgaaagg tatcctgggg atgagcaaag   1380
tctgatttgg gggtgaaggg gaacatgcaa caatgaaccc agttcaatgt ttaggcaaa    1440
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gagacccaag tgcccagatg tggacttttc cttataggca gtggagctcc ctgaagggtt   1560
ctgaagcaga gaagagcata catagtcagg tgtgcttctt acctggacta ctgctgaggg   1620
atatttagga tgcagcatcc tctggatggt tgctataata ataactattg tgacaaagct   1680
tcttcctgtg gagctgttgt gtttgcaaat cggaccaagg tcccaggcat ccaggccatg   1740
gagctaagtt cctagcccag gtctctggtc agggcataag tcattcagtg tgccaaacct   1800
ctgaaaggta gcccggcccc tttatttacc atactacaca cagccagtc accttctcct    1860
cctgagcacc tgctcgtgcc gaattcgata tcaagcttat cgataccgtc gacctcga     1918
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<210> 219
<211> 1026
<212> DNA
<213> Homo sapiens

<400> 219
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tgtccatctt tgctgctcca tttgcactgc ctcccaaagg tcactgtggc tccttctctg    120
acttccacag tcaagttaca cttcataaaa attctaagct cattttcaga agccacaaat    180
ctatccttct ttaaagtctt caaactttga ttgtgtaaat aaatactcag aaacaagatt    240
tctaaaaaac aaacactatt ggccatcgta tgttcaaagg agataacaa tgtttaacct     300
tatatgttgt aggctttcta aacttaattt caaaaaaaga ctaaataaac agtgtcaata   360
tgtctataaa ctcacaacga aaattttcag atcatccaat tgtgtattca ttggccggaa   420
acaatcatgt aaaaaccaca gccctggagc tgggtagcat agaaacaaga agattcagca   480
tttcatggtt ggtgactcaa atctctaaag ggktgtcagg ttaaaaaaaa aaaargaaaa   540
gaaaagaata gaaatttgac ctgatctata aaaatgaaag tcgctgggca aagttttggc   600
ttttcactcc tgacaaagat gagctctctc ataggtagac caaggcacac gagtgatgac   660
tttcgtggcc ccaaaattct tcaagaaaat agtagattga ggagcgatc tgcgcattga    720
tagaggtgct gtttgaactg gatgacattt aagcttcctt ctttctccaa gattctgtga   780
ggccatgaag catgctattt catccccact ccaattgctg tctccctggc ctggtgccct   840
taccacctca atcttgggtc actgatctct tttgcaagaa atcagtcctg cctaccacct   900
gcaacttcat cttcctaaaa tgtcactttc cttaaggcct gctctgttca aaggccagtt   960
cccagccaca ccaatgtaaa ctcgtgccga attcgatatc aagcttatcg ataccgtcga   1020
cctcga                                                             1026
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<210> 220
<211> 1757
<212> DNA
<213> Homo sapiens

<400> 220
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acagacagga ccctcagctg caggtctgtt ggagtaccct gcaatgtgag gtgtcagtgt    120
gcccctgctg gagggtgcct cccagttagg ctgctcgcgg gtcaggggtc agggacccac    180
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180

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ttgaggaggc agtctgcccg ttctcagatc tccagctgca tgctgggaga accactgctc    240
tcttcaaagc tgtcagacag ggacatttaa gtctgcagag gttactgctg tctttttgtt    300
tgtctgtgcc ctgccccag aggtggagcc tacagaggca ggcaggcctc cttgagctgt      360
ggtgggctcc acccagttcg agcttcccgg ctgcttgtt tacctaagca agcctgggca      420
atggcgggcg cccctccccc agtctcgctg ccgccttgca gtttgatctc agactgctgt     480
gctagcaatc agcgagactc cgtggggtag gaccctctga gccaggtggg ggatataatc     540
ttgtggtgcg ccattttta agcccgtcgg aaaagcgcag tattcaggtg ggagtgaccc      600
gattttcccg attttccagg tgccgtccgt catcccttc tttgattagg aaagggaact      660
ccctgacccc ttgcgcttcc cgagtgaggc aatgccttgc gctgctttgg ctcgtgcatg     720
gtgcgtgcac ccactgacct gcgcccactg tctggcactc cctagtgaga tgaacccggt     780
acctcagatg gaaatgcaga aatcacccgt cttctgcgtt gctcaggctg ggagctgtag     840
accagagctg ttcctattcc gccatcttgg ctcctccccc accccccgcc caatcctaag     900
tttatctctt aacaaagtaa atactgcaca cgtatttaca tgttttaaaa tattgtttat     960
ggagcactta ctatgtgttt tacggtccaa gtactttata ttattcactg actctttata   1020
gcaactctat aacatattaa tagattgtct caatttcact gatgacaaaa ctggcagctt   1080
agtaactaat gagtaacaat accagcccct aaaacctagg gtctttccac tacagcacac   1140
tctgactgac attgctcttg ttcagacaca gcactcttca cctagaaaag gatggagagc   1200
tagaaagtgg ttttcttttt caagttgttc ccattcatca atattctatc aagatatatg   1260
gaagagttat tttctaggtc ttccagaagg ggctgctgac acttgggaat tcaaaataat   1320
tactccagag ggaaatgtgg gcatagaaac tttttaaaaa ctgaattttc ccgatctaat   1380
atcggcttcc acatacagta tattatttct taaaaatcag ccagaaatgc acctgagtt    1440
ttatctactg gattttcctt tcccagcccc attcttcttt aagtagtttt ttttccccat   1500
tttataaaag aaaagcatac ctcccaccta tagcttccct ccttatggta tattatctca   1560
ggggataatt tgaaatattg cttgagacac aattctcatt aagaaataaa ctttcaggct   1620
gggtgcagtg gctcacactt gtaatcccag aactttggga ggccaaggcg ggggaggatc   1680
cctgaaggcc aagagttcaa gaccagcctg gaatatatac caagatcccc tctccacaaa   1740
aaaaaaaaaa aaaaaaa                                                    1757


<210> 221
<211> 752
<212> DNA
<213> Homo sapiens

<400> 221
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gcacagtgat tccagagaga agtctttgct cctccatcta tggaaaaact tctcacattg     120
tatttattac tatatgtttc ttactggagt gtctctccta ctggacaggg agcaggttta    180
tttattgctc agtcctcagc ccctggactt aggcagactc atagtagaca tttgggaaat     240
gcttgggaaa gaaaggaggg gaggagagag gaaggactcc atggccatgt ctaaatgccc     300
agcaatgtca tagaggttat gggggtgcag gagaagacac agccctccct ctggcagcta    360
ggatagagcc tagctgctgt taaagacagg cagctcattc ctcacctggg ccaagctgca    420
gctggtcatc tctgcccctt tctccttcca tcttatggga gcttttatgg agtcagaagt    480
gagtgaggca gacctgggag agccctacac tcaggaagaa tgtaggctgc agaaaggaac    540
aggtgtcctg gagttagctc aggaaggtct tgaaggaagg ggttaacyag cagatggcaa     600
cccagtgact tttgttgctc tctgaagcca cagaggaaaa cagtagcaac rrratraaat     660
aaaataaaat aaaaaataat aaaaaagcaa agttcccaag gaaataagat gggggaattc    720
gatatcaagc ttatcgatac cgtcgacctc ga                                   752


<210> 222
<211> 1602
<212> DNA
<213> Homo sapiens

<400> 222
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gatttgagtt gggatgacat tattgatgat tagctggggg agtttttgtc ttcacagtgt     120
tttctcccca tgtatgaatg tttcctgtct ctgtctttac tgaagtcttg taaagctgtg    180
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181

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agtggactta tgtgcctcct gctgccgagg cttggtctgc tgctcctcct accgagtgag    240
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gttctgcggg atccaggtt tgcgggagct ttccaggtac acaggcgcca ggcctgcttc     360
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tgtcgcccgg gctggagtgc agttgtgtga tctcggctca ctgcaagctc cacctcccag   1560
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<210> 223
<211> 1873
<212> DNA
<213> Homo sapiens


<400> 223
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acctccacag tttttgctcag gttctcgttc cctctcccag gcctctctcc actctatact   180
ttcaggaatt ctacccatgc aaagcccatc tcagcttcca cctcactcct gacttgacac     240
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acagagcgcc cagctcacag cagacactaa atggtgaaag aatgcaagag ggtcctgtgt     480
ctccctaagt ccaaaaggag acataagaat attacaggcc gatatttgta acccattaag    540
aaaaaaggtg aaatagtgtc aatacctaag caaaatacca tgagaatata aatcaaatgg    600
tgaacaggag taatattaag acagaaaggc aatggttctc ttctggaacc attagcattt    660
aaatacagaa aagaaaatgc accattttaa cagctgcaga agataataac agacacaatt    720
attttttccct aactagatgc catgccccat gtacagtagt tcctaatcat cccctcatct    780
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gcagttaatt aaccttttcc atcatgcaac cagcaaggca gagctaggat ttgtatccca     900
gtagcacctt ttccagattc aagctcaact cctaaattct cctgcgtctt cactgtattg    960
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cactttagga agctgaggca ggagaattgt gtgagccag aagtttgaga ccagcctggg    1140
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gcctaccaca ccaggcagtg gaaagaatta aattaattta aataaaggag acagtgcaga   1560
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tatgtatggt tttctctaag atacatgtaa gtgtaaaatg cagaagaaaa gcatgcgggg    1740
acgggggggg ggaagaaatt cccttttctt tattgatcag cctttccccc aaaatacttt    1800
ctcaaggaat tattaaatac tcaacatggc gcctcgtgcc gattcgata tcaagcttat    1860
cgataccgtc gac                                                       1873
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<210> 224
<211> 941
<212> DNA
<213> Homo sapiens

<400> 224
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ggcacgagat tttggcaagt gctgttatgt gaacaccacc atcacaatca agatagtcta     60
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ccaccagccc ttgtcaactg actcattttc tgtctgtata gtttatatca tttccagaat    180
gtcatataaa tggaattcta gagtatgttt cctttggagt cgcacctttc acttaatgct    240
tctgagactc atctgtcttg ttgcatatat cagtacagaa gcatttctt ttattgctga    300
gtagtaatct gtcatatgga tgttccacag tttgtttatc catttatcac tggtgggggat    360
acttgggktt tcagttttca gtgattatga agaaagctgc tgtcaacatt tgcaaacagt    420
ttgtgtgtcc acattgtckt agtaaataac taggagtgga attgccgggt tgtatggtaa    480
cagtatactt atctatgaaa aactgacaga cttttctaaa ataactgtac cattttacat    540
tcccaccacc agtgtatgaa agtcccagtt ccttaacttc actgacaatt ggtatgtcag    600
ggtttggttt cattttatt ttgttgttag gatttcaaag ggttatagcg ggatttcatt    660
ttggttttaa tttacacttc cctaatggcc attgagatc tccactgctc gtttgctatc    720
catttgccta ttttcttttg tgaactatgt tcaaatcttt tgtccatttt tttaaaacct    780
ggattgtttc ttattgattt ttgagagttc tttatatgtt ctggatagat atctttgtca    840
gttatgtgtt ttgcaaatat tgtataccat tatgtggctt gtgttttat tccattaaca    900
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<210> 225
<211> 1715
<212> DNA
<213> Homo sapiens

<400> 225
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ggcacgaggg acattggagc tccccacacc actcattgct gcccaccagc tatacaacta     60
cgtggctgat cacgccagct cttaccacat gaagcattg cgaatggccc ggccaggggg    120
cccagaacac aacgagtatg ccctggtgtc ggcatggcac agttctggct cctacctgga    180
ctctgaggga cttcgacacc aggatgactt tgatgtgtct ctgcttgtct gtcactgtgc    240
tgcacccttt gaggagcaag gagaggctga gcggcacgtt ctgcggctac agttcttcgt    300
ggtgctcacc agccagcgag agctcttccc caggctcact gctgacatgc gccgcttccg    360
gaagccaccc agactgcccc ctgagccaga ggctcctggg agttcagctg gcagccctgg    420
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agaggtgggc atggcacgag cacggctggc tcagctggtg cggctggctg gagggcactg    540
ccgtcgggac accctttgga agcgcctctt cttgctggag ccaccggggc ctgatcgact    600
gcggctaggg gggcgcctgg ccctggcaga gctggaggaa ctcctagaag cagtccatgc    660
caaatccatt ggggacatcg accccagct ggactgcttc ctatccatga cggtctcctg    720
gtaccagagc ctgatcaaag ttctcctaag ccgcttcccc agagctgtcg ccattccaa    780
agcccagact tgggaactca gtacctggtt gcgctgaatc agaagttcac tgactgctct    840
gcgctagtgt tctggactcc acttaggaaa gacgtctctg aagtggtctc ccgagaagcc    900
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gccagaggca ggactgacca gcccttctgg gccccagggc aagccagaca ctgatggaca   1140
ccaaaggctt tgtaactatg tcttgagggt ctgctgcccc agcctggcag caggaaccgc   1200
cctccccaaa cacccacagc cactgaccca tccaggactc cagagagtca ggtcaacccc   1260
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ttgaccactg tcagccacct gtgtcccttg agccttcggg tcttcacttc ccacttggac    1440
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aagcacttgc ggccaccgtc aagtccctt gctctcggac cctgggtttctcatccttta     1560
atgaggtggg ttcagaagct ctcccatctt cacagcaacc ctggcactgg cttctcaatg    1620
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<210> 226
<211> 945
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (295)..(295)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (875)..(875)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (914)..(914)
<223> n equals a,t,g, or c

<400> 226
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aagaaataaa atatcaaacg attggaaaga tgttaatgtg tcatcattca tagaaaacat    180
gattcataga tatacataca cgaatgcttt gaattcataa gtagattcag ccagttgctg    240
gatataaagt caatatacaa aaactatttt tatagacatg aaacacgcaa tgagnaaaaa    300
aatttaacca ttttttagtag catcaaaaaa cccccatacc taggaatatg aatttgtagt    360
actatttggg atatgttgat ggatatttat catttcagt ttgggattat tataaagaaa     420
atagccctga acatttgtaa tatatgactt ttggtgaatg tagcattcat ttctgttgat    480
tacaaactca ggggtgaaat tgttgagtcc taagggagct atagatgtat tcaacttcag    540
ctgatatggc taaataaatt tgcgaaaaag attgcatcaa gttatgctcc catcagcaat    600
atgagagttc ctgtttttcc acattgtcag caacactttg tactgttact ccttttaatt    660
ttagccgatt tggctgaagg tgtggtaata tctcattgta gtggccaggc gtggtgctca    720
cgcctgtaat cccagcactg tgggaagcca aggtgggccg atcacgaggt caggagatcc    780
agaccatcct ggctaacatg atgaaaccct gttgcctgta gtcccaacta cttgggaggc    840
tgaggcagga gaatggcatg aactcgggag gcggngcttg cagtgagcct ccagcctggg    900
caacagagtg agantctctc aaaaaaaaaa aaaaaaaaac tcgag                   945

<210> 227
<211> 1538
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (112)..(112)
<223> n equals a,t,g, or c
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<220>
<221> misc_feature
<222> (147)..(147)
<223> n equals a,t,g, or c

<400> 227
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agcccggcgg cctggccgtg ggcagccgct ggtggtcccg gtcgctgact gnggcccggt   120
ggccaaggcc gctctgtgcg cggccgnagc tggagccttc tcgccagcgt cgaccacgac   180
gacgcggagg cacctctcgt cccgaaaccg accagagggc aaagtgttgg agacagttgg   240
tgtgtttgag gtgccaaaac agaatggaaa atatgagacc gggcagcttt tccttcatag   300
cattttttggc taccgaggtg tcgtcctgtt tccctggcag gccagactgt rtgaccggga   360
tgtggcttct gcagctccag aaaaagcaga gaaccctgct ggccatggct ccaaggaggt   420
gaaaggcaaa actcacactt actatcaggt gctgattgat gctcgtgact gcccacatat   480
atctcagaga tctcagacag aagctgtgac cttcttggct aaccatgatg acagtcgggc   540
cctctatgcc atcccaggct tggactatgt cagccatgaa gacatcctcc cctacacctc   600
cactgatcag gttcccatcc aacatgaact ctttgaaaga tttcttctgt atgaccagac   660
aaaagcacct cctttgtgg ctcgggagac gctaagggcc tggcaagagaagaatcaccc   720
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cccccttctac atgggcatga gggaagccca gaattcccac gtgtactggt ggcgctactg   840
tatccgtttg gagaaccttg acagtgatgt ggtacagctc cgggagcggc actggaggat   900
attcagtctc tctggcacct tggagacagt gcgaggccga ggggtagtgg gcagggaacc   960
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cagtgggcac atgtggggca cgttccgctt tgaaagacct gatggctccc actttgatgt   1080
tcggattcct cccttctccc tggaaagcaa taaagatgag aagaaccac cctcaggcct   1140
tcactggtag gccagctgag gccccaagtg cccaggcttg gtcaccggga agaacaactc   1200
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atttgattgt ggggttcttt ttgtggggag gggtggtata acttttcttc agaagaccca   1320
tgtgggacac ctccaaggct ggcctcctca taagccctgc ctacaccatg ttccagtaaa   1380
cctctccacc aaggaactgt gttcagctgc cacaggcctg gaggagtttc ctggcctgtc   1440
acgtgaggtt tgatcagtaa accagtgcas gyttggccaa aaaaaaaaaa aaaaaaaaa   1500
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaactcga   1538

<210> 228
<211> 663
<212> DNA
<213> Homo sapiens

<400> 228
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tactagttca ctggatccct cctctagggg cctggggact ttcactgatg ctcttcctga   120
ttctagagca aaggtgtggg aaggggaaat ggaggaatgc cctcctgtct gtgtcgttct   180
ctgtgccaca gctacagatg cagaaggttt ctctggatag cacacctctg aatgtaaatc   240
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tctggactgc ctcaatatca agggctgaga cttttgaat ttgaatattc gttgggtttc   360
atgttaagaa gcctgtggtc taggagtgct attcagtgtt tcttttcctg ataaacactt   420
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ttaatcacat tgataaaatc tatccttcac cacctctggt tctactatag ttgattttta   540
ttttaaatgt ttaattgtat ttgattaaac acttaactgg attttggaat aataaaactc   600
tcgtccaatt tggcttttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   660
aaa   663

<210> 229
<211> 1816
<212> DNA
<213> Homo sapiens

185

<220>
<221> misc_feature
<222> (504)..(504)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1405)..(1405)
<223> n equals a,t,g, or c

<400> 229
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gaacgatccc gtagaaatca aggctgtgaa gctcaccagc tctcgaaccc agctacctta   180
tgaatactat tcactgccct tctgccagcc cagcaagata acctacaagg cagagaatct   240
gggagaggtg ctgagagggg accggattgt caacacccct ttccaggttc tcatgaacag   300
cgagaagaag tgtgaagttc tgtgcagcca gtccaacaag ccagtgaccc tgacagtgga   360
gcagagccga ctcgtggccg agcggatcac agaagactac tacgtccacc tcattgctga   420
caacctgcct gtggccaccc ggctggagct ctactccaac cgagacagcg atgacagaa    480
gaaggaaagt gatatcaaat gggnctctcg ctgggacact tacctgacca tgagtgacgt   540
ccagatccac tggttttcta tcattaactc cgttgttgtg gtcttcttcc tgtcaggtat   600
cctgagcatg attatcattc ggaccctccg gaaggacatt gccaactaca mcaaggagga   660
tgacattgaa gacaccatgg aggagtctgg gtggaagttg gtgcacggcg acgtcttcag   720
gcccccccca gtaccccatg atcctcagct ccctgctggg ctcaggcatt cagctgttct   780
gtatgatcct catcgtcatc tttgtagcca tgcttgggat gctgtcgccc tccagccggg   840
gagctctcat gaccacagcc tgcttcctct tcatgttcat gggggtgtttggcggatttt   900
ctgctggccg tctgtaccgc actttaaaag gccatcggtg gaagaaagga gccttctgta   960
cggcaactct gtaccctggt gtggtttttg gcatctgctt cgtattgaat tgcttcattt  1020
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ggttcgggat ctccctgccc ctcgtctact tgggctacta cttcggcttc cgaaagcagc  1140
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tcctgktcct tggtttcatc atcctggtgg katcctgktc acaaatcagc atcgtcatgg  1380
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cagcgccaag cggcatccac caagcatcaa gttggagaaa agggaaccca agcagtagag  1560
agcgatattg gagtctttg ttcattcaaa tcttggattt ttttttttcc ctaagagatt  1620
ctcttttag ggggaatggg aaacggacac ctcataaagg gttcaaagat catcaatttt  1680
tctgactttt taaatcatta tcattattat ttttaattaaaaaaatgcct gtatgccttt  1740
ttttggtcgg attgtaaata aatataccat tgtcctacaa aaaaaaaaa aaaaaaaact  1800
tctcggccgc aaggaa                                                 1816
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<210> 230
<211> 406
<212> DNA
<213> Homo sapiens

<400> 230
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taaaagcacc ccttcagagc aatctcattt ccatttcttt caggccactt attttttcca   120
acttttttc cgtatcttca taaatgtttc actcttcttt gttagtattt cttagtctct   180
tgagtcaaga aatatttact gagtatgatt gcatgcataagtagtgtgcg ttagagatac   240
gatacctgta agacaccaca gtgctgggta gatccgggtg ccattgtctg ttgccagggc   300
cgaagttggc attttgtaag tgttcgaata agcaccatgc cgtgggataa gaaataaaag   360
tgtgtgcctc atctgtaaaa aaaaaaaaaa aaaactcgag gggggg           406
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186

<210> 231
<211> 1495
<212> DNA
<213> Homo sapiens

<400> 231
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gacccctacc atccatcttg atgtggttcc tgcactgga actgcttggg tacgggcctg     180
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catggtatcc tcccggcacc cctccctctg ccttgcattt tacttgtgat ccaggtactt     300
cctattgaag acagtggacc agcacatgaa gctggccttc tccaaggtct tgcgacagac     360
aaagaagaac ccctctaatc ccaaggataa aagcacgagt atccggtact tgaaggccct     420
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tccagagaat ccattgagat gtcccatcaa gctctatgat ttctacctct tcaaatgccc     540
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ccaacagccc aatctggtac tcagtccagc ctatcagcag agagcagatg ggacaaatgc     660
tgacgcggat cctggtgata agagaaattc aggaggccat cgcagtggcc agtgcaagca     720
ctatgcactg agatgccttg gccatggcac aagagaaacc agccaggaaa aaccagacag     870
actttcacac taaagaagag gcctccattt tttttttct tttttttatt ggtgtagtta     840
cgaagccttt caggctgctt ctgtttaaaa tataaaagaa aactttgccc cctttgcatc     900
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<210> 232
<211> 2895
<212> DNA
<213> Homo sapiens

<400> 232
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aagaagaaga gccagtgctc ccatctcaca gtggagttca agcaggagat ctaggtcttc     240
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caacctcagc ctggccagtc tcaccttcca gcgacaagct tccctggaac aagcaaattc     360
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catcagcact tcccacagtc tgagccgtcc tgactactgg tccagtaaca gtcttcgagt     540
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tcaaaaatag gctaaacaga attttgaggg catggcccaa ataactcatg agttccaagt     720
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ttttttgaatt ttagtagaga tgaagtgtca ctatgttacc aggctggtc tcaaactcct     1320
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aaaaaaaaaa aaaaa                                                      2895
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<210> 233
<211> 2150
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (874)..(874)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1198)..(1198)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1201)..(1201)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1266)..(1266)
<223> n equals a,t,g, or c

<400> 233

188

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cggatgaaca agcggcaggt gagcttgtcc gtcctctttt tctcctggct cttcttgtcc   180
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tggtctgata cccgggtcat tcgctttctt tggagactgt ggccagaggc cgccttgtcc   300
gcctcattat ttttaacccc gaactgattc aggcctacc tggggcgggg cgggaagcgg   360
tgtcttcacg ttccattcct cccactgagg caggggagca aatggaaacc gtacgcgctt   420
gaagtgggag ttggggtgct tattgtttta gtcattttaa tgcggcggac tcttgatttc   480
tccagtcgga gcgactccag gtggtttcgg gagagacgag gtttagccgg tttctggggc    450
gctcaggaag gcgattggag gccccacaaa aaccgttttg ctgctttcag ctccttgcaa   600
ccctttagta gagctgaacc gtagcgggct gcaccgactt tgacttggac cactctgggc   660
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gtgacagagt gagactccgt ctcaaaaaaa aaaaaaaaaa aaaaaaaaa  2150
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<210> 234
<211> 3102
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3096)..(3096)
<223> n equals a,t,g, or c

<400> 234
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cccccaccc cgccccaccc agataaacta tatctacact gtctcgtcaa gttctctgac   180
acgatctttc tgggctctac atttcctact agtttgtgtc cagaaactgc aagttgacat   240
gaatagagga caaaggttgt gtcttgcttt tgtctctctc ttccctccct gcaactctct   300
cksscctcct cccactctct tcccctcccc cctcctcca ctgtctctca cctcccccac   360
ccccactct ctctcatctc tcgctgtgtc ctgtgtatgt gtgggtgtgt gtgtatttgg   420
gtgtgtaaat gttggttctt ccactactgg attttgtaat ctaggataaa tcactttttt   480
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189

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agctgcacaa aacgtagaaa gaagacatag cgcctgccag ggaataggaa atgagggcac    600
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atttgctttt caagaaaaat gccaaaagct atttaaataa ttcgaggtta catcgtargt    720
tttgattttt ctcaatttaa gatacagaaa tacagcaagc cttaatataa agtttcctaa    780
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ctgcctttag cttttcagaa cttgagatgt ggcagcactg gactgggttt ttttaaatgt    900
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catttttaca agtatctaac tatcaaattg tgtttagtaa cttgagtgta tgcacaagtt   1020
tgatcaacag caaaatagag ttctgaattt cttttaaagt gatgatatat tattttgtga   1080
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tacaaaagga atgtttcctt tataaatcac agaagaaaat gacaatatct gttggatatt   1920
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tttaagaaat acaaaaaaaa aaaaaaaaaa aaaaanaaaa aa                       3102

<210> 235
<211> 865
<212> DNA
<213> Homo sapiens

<400> 235
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aacctttatt aaaaagacaa ataaactatt ttgtagaaga tcagactcct acttaactgg    180
aagagaaatg tctattaaat gtctctcctc tttctctggg tcaagaccat gtaattttat    240
gcttcagaga tgaagatact gtttgtttac aaagattta gtttttaaga catccaaaac    300
tctatgctag agcaaaaatc aaatagcaaa ggacactagc cagaaaatac agtgtgtgtg    360
tgtgcacctg tgtgcctgct gaacaacttg acagtgtaac agataaggta actgaagatg    420
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190

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<211> 2612
<212> DNA
<213> Homo sapiens

<400> 236
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<210> 237
<211> 1899
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1439)..(1439)
<223> n equals a,t,g, or c

<400> 237
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ctccctttg tgttattgtt cagaccaaat tttatcagtg tccttcaccc tttattctac       180
tcacattgtt tatttctata cttaataagt cctgttcact cttcctctat aatatattac      240
aaacctgatc attgtcacta cacccattc attcctggtc tactacaata gccaggtta        300
cctactttcc tttcggcatt tggacaatct gtgtttctgg aagtagccca aatgatcttt      360
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ctattatatg cttaataaaa tccaatatcc ctaccttggc ctgtatactc aataaagtcc      480
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aaactggttt tgcatctttt tagttctatc tattcttttg cagatgccaa tcttagtaat      660
cataagcagt ttacctctaa attaatgcta aatattgtaa aaggtgtatt atagttcag       720
tctttcattt attctttcaa ccaccaagtg tcgattgaac acatacattg ggtcacacca      780
atcaaataag atagactccc aggcatcacc gagcatctac tactcaattc atctcaggat      840
ctatacaagg ggtcatttta tcagaaacca aagtcttgat gctgtccgaa aaatcacgtt      900
ttcaccatga tctcctactt ccctaggtgg aagtataact ttttaggata tatcatggtt      960
gctgacttaa cttttgtatt ttttaaatat actcatgaca agtatcatat aaaacctaac     1020
cagcaacttt gcaccagcaa aagtttttca acatttcaat tcttacaaaa tcaaatgata     1080
taatttccta tgtagtaaaa aattcacaca tctgcaaagc ttggtttcac taccacctgt     1140
taaaatctta cctttggaag ctatttatga ttgaaaaaca ctttacctca ctcacaaaga     1200
gctggaagtc tctcttcaat ccaatatgca cacagaagac aaaaagctgt atcattcctt     1260
gatgatatat ttgaaatcat atggccacgt ctgtccattg tcttcagagt ttctaagtat     1320
ttcagaaaat tatgacttgc actgtagaac tattttaaag aaattccatg gtgcaaacag     1380
aaaaactaaa acttttcatg ttaggataat ttattaaaaa tacaaacaaa tcctatgtnt     1440
acataagaag atagtaacta gccttttttga gagggaaatt tttctctcat aacttctttt     1500
ctagtaattt caataaagaa taactgccat tccaacgttt gcccatctc actctcttgt      1560
cttcttatgg ccaagtattc aagcttgaaa tttgcagagg aaattcttgt ccgttttta      1620
tatcatgtgg taagcctaat aaaacatctt ctgaaataat tagcccttaa aaggatagta     1680
tcttctacct gacagaggca aatattattg aaaagtttgt accttataag cacattaatc     1740
atggagtcct ggaactggat tctgtctaag actgactttt gcttaattaa gttcacagag     1800
attttccaca tatttttcca gaacattgca tgtagagata ttgtcgatca atcacataac     1860
tagggtcaga aagatgtaac aagggagaaa aaaaaaaa                             1899
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<210> 238
<211> 238
<212> DNA
<213> Homo sapiens

<400> 238
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ccacgcgtcc gctgcccca tgcagtggta gtcaccgttc tgtcccccgc gggtgctggt       60
gagaaaggta aaagggcggt tccagagcct gagggcctgt gagtgcagtt tacataactg      120
ccgaaactta aggaagcgtc taaataaaaa gaaacatgtt aacccaaaat ggtttatttg      180
ttttttttt ttttttggt ttccagagct catgcaaaca tgcaaaaaaa aaaaaaaa         238
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<210> 239
<211> 1459
<212> DNA
<213> Homo sapiens

<400> 239
acgcgtccgg cgtctgcagc tgcagggggag gaggactggg tccttccctc tgaagttgaa   60
gtgttggagt ccatctatct agatgaacta caggtgattaaaggaaatgg cagaacttca   120
ccatgggaga tctacatcac tttgcatcct gccactgcag aggaccagga ttcacagtat   180
gtctgcttca ctctggtgct tcaggtccca gcagagtatc cccatgaggt gccacagatc   240
tctatccgaa atccccgagg actttcagat gaacagatcc acacgatctt acaggtgctg   300
ggccacgtgg ccaaggctgg gctgggcact gccatgctgt atgaactcat tgagaaaggg   360
aaggaaattc tcacagataa caacatccct catggccagt gtgtcatctg cctctatggt   420
ttccaggaga aggaggcctt taccaaaaca ccctgttacc actacttcca ctgccactgc   480
cttgctcggt acatccagca catggagcaa gagcgaagg cacaaggaca ggagcaggaa   540
caggaacggc agcatgctac aaccaaacag aaggcagtcg gtgtgcagtg tccagtgtgc   600
agagagcccc tcgtgtatga tcttgcctca ctgaaagcag ccctgaacc ccaacagcct   660
atggagctgt accagcccag tgcagagagc ttgcgccagc aagaagaacg caagcggctc   720
taccagaggc agcaggagcg ggggggaatc attgaccttg aggctgagcg aaaccgatac   780
ttcatcagcc ttcagcagcc tcctgccccg gcggaacctg agtcagctgt agatgtctcc   840
aaaggatccc aaccacccag cacccttgca gcagaactat ccacctcacc agccgtccaa   900
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accaggtcaa atcagcaaag gttgggcgaa acccagaaag ctatgctaga tcccccccaag   1020
cccagtcgag gtccctggcg acagcccgaa cggaggcacc cgaagggagg ggagtgccac   1080
gcccctaaag gtacccgtga cacccaggaa ctgccacctc ctgaggggcc cctcaaggag   1140
cccatggacc taaagccaga accccatagc caaggagttg aaggcccca caagagaagg   1200
ggcctggcag ctggcagggg cccccacccc gcaggactcg ggactgtgtt cgctgggagc   1260
gctctaaagg ccggacaccc ggttcttcct accctcgcct gcctcggggc cagggagcat   1320
accggcctgg tactcggagg gagtccctgg gcctggaatc taaggatggt tcctagcagg   1380
acttggtggg gggaacaggg aattggggat gggagggagg caataaagat atttggcctt   1440
caaaaaaaaa aaaaaaaaa   1459

<210> 240
<211> 532
<212> DNA
<213> Homo sapiens

<400> 240
actcatataa gaaagcagta cgccgcagta ccggtccgaa ttccgggtcg acccacgcgt   60
ccgcccacgc gtccgcacct cccttggctg tggggagggg cttccatgcc ctgtgtggct   120
ctcgggtggg ctgtcgcacc acactgctct tcctttctct tcacgaatca cgcaagcctc   180
ctagtcagtt ctgatgagat aacctggata tcttggttgc cggtgaagga tttacatgct   240
tattatggtt tttttgttgt tgttgttgtt tggttttttt tttgatggga gcctcagatc   300
gccgctgttg ctaatcatcc atcttggccc tgccccacca tttctgcaaa tttaaatatg   360
agatttgtcc ccttaggtgc acagtccaga ccccatccag tccagctcct tttaagcca   420
catggaaagt cagctgagaa tggtttggga gcccaggtgc gctgtcttcc gccctgccct   480
ctccctgaaa taaagaacag cttgacagaa aaaaaaaaa aaaagggcgg cc   532

<210> 241
<211> 1084
<212> DNA
<213> Homo sapiens

<400> 241
agaagacgac agaaggggag ccgctggggc cgcgattccg cacgtccctt acccgcttca   60
ctagtcccgg cattcttcgc tgttttccta actcgcccgc ttgactagcg ccctggaaca   120

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gccatttggg tcgtggagtg cgagcacggc cggccaatcg ccgagtcaga gggccaggag    180
gggcgcggcc attcgccgcc cggcccctgc tccgtggctg gttttctccg cggggccctc    240
gggcggaacc tggagataat gggcagcacc tggggagcc ctggctgggt gcggctcgct      300
ctttgcctga cgggcttagt gctctcgctc tacgcgctgc acgtgaaggc ggcgcgcgcc     360
cgggaccggg attaccgcgc gctctgcgac gtgggcaccg ccatcagctg ttcgcgcgtc     420
ttctcctcca ggtggggcag gggtttcggg ctggtggagc atgtgctggg acaggacagc     480
atcctcaatc aatccaacag catattcggt tgcatcttct acacactaca gctattgtta     540
ggttgcctgc ggacacgctg ggcctctgtc ctgatgctgc tgagctccct ggtgtctctc     600
gctggttctg tctacctggc ctggatcctg ttcttcgtgc tctatgatt ctgcattgtt      660
tgtatcacca cctatgctat caacgtgagc ctgatgtggc tcagtttccg gaaggtccaa     720
gaaccccagg gcaaggctaa gaggcactga gccctcaacc caagccaggc tgacctcatc     780
tgctttgctt tggcatgtga gccttgccta aggggggcata tctgggtccc tagaaggccc    840
tagatgtggg gcttctagat tacccccctcc tcctgccata cccrcacatg acaatggacc    900
aaatgtgcca cacgctcgct ctttttaca cccagtgcct ctgactctgt ccccatgggc      960
tggtctccaa agctctttcc attgcccagg gagggaaggt tctgagcaat aaagtttctt     1020
agatcaatca aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaa aaaaaaaac           1080
tcga                                                                 1084


<210> 242
<211> 870
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (743)..(743)
<223> n equals a,t,g, or c

<400> 242
ggcacgagca gatattaaat ctcacagaaa ggtgttcctt attaatcttt acaaaattgt     60
catttccccg gtgaagccaa tttacattaa aaataatgtt cagaaaatgc tgctgcctgc     120
tttctctcct cttttaccca ccccttgttc tcccagcaat cttcgccctg tatgtttatg     180
tggacaattt ctattgtaac attctccatt ccattaactctgcctcttcc tctgagggggg   240
gaaaataaaa ccctaaatgg ctctaatagt tatgtatttt attttgtctc agaggtttcc    300
aaacttctgc ttttagcttc cttttcactg ggacaaatgg atgtaagtta ttttccagtt     360
tcctgaaaaa taatcaggga ctatttcttt catctatctc aggtgcttca tgagtttcct    420
aagatattaa ttacggtttc catacattca gaatcaaggg actcacggat atggtactgt     480
gttcactgct acacagagtt tttctagaaa aaaaaattct ttattttat cttctatttg     540
tatccaaacg atggtaaaac aaaattcctc tttagctagg tactgggatt ttttctttag    600
gaaatactaa tagagttaca aaggttagct tatagtaga caaaagactg gcggccaaac      660
agagcagtgg gtgaaatggg tccctgggtg acatgtcaga tctttgtacg taattaaaaa    720
tattgtggca ggattaatag canaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     840
aaaaaaaaaa aaaaaaaaaa aaaaaactc                                       870


<210> 243
<211> 2263
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1586)..(1586)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
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194

<222> (2262)..(2262)
<223> n equals a,t,g, or c

<400> 243
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aattcggcag agcagcagcg tccggcgaga tgaaggcgct yggggctgtc ctgcttgccc      60
tcttgctgtg cgggcggcca gggagagggc agacacagca ggaggaagag gaagaggacg     120
aggaccacgg gccagatgac tacgacgagg aagatgagga tgaggtkgaa gaggagaga      180
ccaacaggct ccctggtggc aggagcagag tgctgctgcg gtgctacacc tgcaagtccc     240
tgcccaggga cgagcgctgc aacctgacgc agaactgctc acatggccag acctgcacaa     300
ccctcattgc ccacgggaac accgagtcag gcctcctgac cacccactcc acgtggtgca     360
cagacagctg ccagccyatc accaagacgg tggaggggac ccaggtgacc atgacctgct     420
gccagtccag cctgtgcaat gtcccaccct ggcaaagctc ccgagtccag gacccaacag     480
gcaaggggc aggcggcccc cggggcagct ccgaaactgt gggcgcagcc ctcctgctca     540
acctccttgc cggccttgga gcaatggggg ccaggagacc ctgacccacggcccctcccc     600
acccccaccc ggctcacccc cggccctgcc agcactctgt ctggtacctt cccctcctgc     660
ccctgcacca gctttggaga atggatttgg agtgtcttgg gcgatccagc cagcgcaggc     720
cccccggccc ggttgcttcc tcagttcccg gctgtgtcct tggtgtcctt tctccaccac     780
ctgtgagcag caagactgcc gcacgtgggc gctgggtcca gacctcggct gccacgyccc     840
aggacctgya gccctcacgg gggctgggga tccccatcag cacagccagg cagagatgat     900
acccaccaca cacctggggg cccccacacc cagtcctcac ccttaacttc tgccatggga     960
atttctccat ctgcagcagt cacacgggcc caccctgccc ttcccaggt cggcctctcc    1020
gctgtctgga gggaagggga tttggaggga ggctgtcgtc gcccccagga aagacgggcc    1080
tgggggaggc gggacagtgg gagaggcgcg ctgaggatga gagggcacag ggaggtgggt    1140
tggggtgagg ccacatgcgg aggggcgggg cggggcgggg ctggggggac aggcaccaag    1200
tatgaagagg atggggccag cggggcctgt ctggctatgg cgtgagcacc gctatgggag    1260
accctggctt ggaaagtgaa cttgcagcct tggatgggga agggccagat gctgggtggg    1320
tgcctgtcac cttgaggtga ccatctaggg tcagtacctg ctgggcttag gacagcgcct    1380
gaggctggga atacctgtct ctgctctaggg agaggctaaagcaggctaga gcagtggagg    1440
ggtggagttg atgaaaggag aggagtagat gagatggaat ttttccagcc tcatcctggc    1500
ctgccctcta gactccagtc cccaagccct cagcctagtg ggtgtcatgg atggatctgg    1560
gggtgtcaga caggcttacc ctgtgnccag ggaggggca gaatgggcct gcagcttcct    1620
gcaraggaag caggactggg tagcagagcc gggaaggtgg gtggcccatt acaggggggt    1680
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ctgacttggg tatcagtttc cccttctgag aagtacagag tgagacttaa agaacccta    1860
gatccccacc agttcaacac tccattaact gggaagccca gagtcctgtc cggcctgcca    1920
agttcatcct ggtggacagc gggaggcctc cgctaactgt tctcttcttt tccttattaa    1980
taaaacacac aatgcctagc tgggggggtcg gaaggcaaat gccctagatg gtggggtcac    2004
gtctttctcc ttctccttcc tccttctgct ggctgaagtg atgactggag ctcagcaacc    2100
actttgcacc atgaggcagc actgagcacg gtagggcagc ctggtgagag gggcctagct    2160
cgctgccgac agaagtcact gcctacctca gggtcccctt acctgggtgg gaaataaatt    2220
tctgctgtgt tgaaaaaaaa aaaaaaaaa aaaaaaaaaa anc                      2263
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<210> 244
<211> 2566
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2553)..(2553)
<223> n equals a,t,g, or c

<400> 244
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gcaaatagca acttcagtac atcataatat aaatagaaaa aaaagatcag tgcttagatt      60
gttaatgttt tgtttttatt tgaattattt tactaacttg tttttgtttt taacctgttc     120
tcgctcagag tccctctcct ccccgacagg accctattca ggtttcccct tcttaaagtc     180
```

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tcccccagtg aggaactctc tcaacaaggg cccactcctg gtgcagtact atagcttttc    240
atcccacctc agagtccccc gcaaaaagaa acaagtgatc agagtaccag tcagggtacc    300
tcctaaaagc ccagcgatgt cccctccatc cagtccaagg tttcactttt tcaccttttc    360
tggtcctttc cccaacagct attaatggta ttatccattc aggtctttct tcaccccagg    420
ccttgtggga ccamccttaa tcatccagtg gtactgcccc ctcttaggat atacaccam     480
cgstcacaca ggatctccac ccagaaacaa tgacatctgg ggtctttctc cagtcccctg    540
gcatggtatt tcttacaaac tttctacctc ccactggcta atagctttat tcaagtasaa    600
ttacacgcca taaaatttac tcattttatt tttttatttt tattaagtta ggttgtgttc    660
aggatttact cttttttaagt ctgcaattca cttttttttt ggtaaattta gagttgtaca    720
gtcatcacca tcatccaatt ttagcacatt tccatcacct caaaaagatc cctcatgccc    780
atttgstgct attccacatt ataaccttcc acccctggca accactaatc tactttgtgt    840
ctgtatarat tggctttttc tgcatatttc atataaaaat ggaacataa atatttggtc      900
ttaagtattt ttgaaacata taattttgtt gtggaaatag tagttgattt tatctatgtc    960
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accaaaaggt yctycggttt gatcctactc agcttacaaa gggctgtaaa rtgagggacc   1140
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gaatgttgga cgatttgcac aagtacagag atgtcattgt tgtgcctttt tcaaaagata   1260
cagttagtga tgttgggggtt ggcctctgtg atgaaaaggg tabgaatgt gatgtttac   1320
tggagccaaa tacaccatgg ggtcccaaaa ctggggagct caatgctttc ttgtcattga   1380
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ctggatctga ggtcactgaa gatgaagttg gagatgaaga agaagtatcc aagaaacaaa   1500
ggaaaaagga gaagccaaag aagttcacta gacmaccaaa aaagcaggta tcttcaccct   1560
gtgcccagag gaaagaaaag gcattggaga aggtaactct gaattatctg ktgktaaagt   1620
catatggaaa aataagcatg tgagtatagc cagaaaaaaa taaaaagagt aatgaagaca   1680
catggaatgc tagcaatgta aaaatgaagt tttttatga ctgagattaa agatctctaa   1740
gatatattga caaatgagaa aaggaaggtg cagaaacgta tagtggtata gtatgctacc   1800
atttgtgtaa agtagatggg ggaaatatat aaataacttc cttgtatatg cataaaatgt   1860
ttctggaagg ctacataaga actcgataaa attggttgcc tctcaggaag ggaactgaac   1920
gtgtaaggga cagaagtgag agtcttttca ttatatgtgc cattatacct tttgaatttt   1980
aaaccaatat tatttattca aaaaattaaa aatagtcttt taaattaaaa ataaatcata   2040
ttttatgata tttaaaaata attcttattt ctccatgcct ttgaaggaag gggtaaaaaa   2100
gccaggtagg aataagagaa tagtaataac cæccattggc taaaagaaaa actgtgaatt   2160
tcaaaaatgt gtgataggtt gagtctgggt taagatccac agaattacat tggacacatt   2220
gtacattcat ctttgtgtta agtagcacag gcatataagt gggttaattc taaaaaaaaa   2280
ttgtatcagc tggtcttgag cttttgacct cgtgatctgc ccgcctcagc ctcctaaagt   2340
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gtatcagtta gcctgtttat tcacgtaaaa gttttccacc atgtcttatt atccatggtc   2460
cataggtcat ctataacaca tataataaag tacatcattg ctgaaaaaaa aaaaaaaaaa   2520
actcgagggg gggtcccgta cccaattctc ctnacatgca tcgtat              2566
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<210> 245
<211> 1835
<212> DNA
<213> Homo sapiens

<400> 245
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cagggagggc catgatttcc ctcccggggc ccctggtgac caacttgctg cggttttttgt   180
tcctggggct gagtgccctc gcgcccccct cgcgggccca gctgcaactg cacttgcccg    240
ccaaccggtt gcaggcggtg gagggagggg aagtggtgct tccagcgtgg tacaccttgc    300
acggggaggt gtcttcatcc cagccdtggg aggtgccctt tgtgatgtgg ttcttcaaac    360
agaaagaaaa ggaggatcag gtgttgtcct acatcaatgg ggtcacaaca agcaaacctg    420
gagtatcctt ggtctactcc atgccctccc ggaacctgtc cctgcggctg gagggtctcc    480
aggagaaaga ctctggcccc tacagctgct ccgtgaatgt gcaagacaaa caaggcaaat   540
ctaggggcca cagcatcaaa accttagaac tcaatgtact ggttcctcca gctcctccat    600
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196
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cctgccgtct  ccagggtgtg  ccccatgtgg  gggcaaacgt  gaccctgagc  tgccagtctc      660
caaggagtaa  gcccgctgtc  caataccagt  gggatcggca  gcttccatcc  ttccagactt      720
tctttgcacc  agcattagat  gtcatccgtg  ggtctttaag  cctcaccaac  ctttcgtctt      780
ccatggctgg  agtctatgtc  tgcaaggccc  acaatgaggt  gggcactgcc  caatgtaatg      840
tgacgctgga  agtgagcaca  gggcctggag  ctgcagtggt  tgctggagct  gttgtgggta      900
ccctggttgg  actggggttg  ctggctgggc  tggtcctctt  gtaccaccgc  ggggcaagg      960
ccctggagga  gccagccaat  gatatcaagg  aggatgccat  tgctccccgg  accctgccct     1020
ggcccaagag  ctcagacaca  atctccaaga  atgggaccct  ttcctctgtc  acctccgcac     1080
gagccctccg  gccacccat  ggccctccca  ggcctggtgc  attgaccccc  acgcccagtc     1140
tctccagcca  ggccctgccc  tcaccaagac  tgcccacgac  agatggggcc  caccctcaac     1200
caatatcccc  catccctggt  ggggtttctt  cctctggctt  gagccgcatg  ggtgctgtgc     1260
ctgtgatggt  gcctgcccag  agtcaagctg  gctctctggt  atgatgaccc  caccactcat     1320
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gtcatgggaa  agagtcacac  tcctgaccct  tagtactctg  cccccacctc  tctttactgt     1440
gggaaaacca  tctcagtaag  acctaagtgt  ccaggagaca  gaaggagaag  aggaagtgga     1500
tctggaattg  ggaggagcct  ccacccaccc  ctgactcctc  cttatgaagc  cagctgctga     1560
aattagctac  tcaccaagag  tgaggggcag  agacttccag  tcactgagtc  tcccaggccc     1620
ccttgatctg  taccccaccc  ctatctaaca  ccacccttgg  ctcccactcc  agctccctgt     1680
attgatataa  cctgtcaggc  tggcttggtt  aggttttact  ggggcagagg  atagggaatc     1740
tcttattaaa  actaacatga  aatatgtgtt  gttttcatttgcaaatttaa  ataaagatac     1800
ataatgtttg  tatgaaaaaa  aaaaaaaaaa  aaaaa                                  1835


<210> 246
<211> 661
<212> DNA
<213> Homo sapiens

<400> 246
gaattcggca  cgagggggaaa  aggatgctga  acgagagcag  aaagcctctt  tcctttgctt       60
cacgcctttc  cagtctttat  tttaaactcg  ggttcccttt  ctgtggtcgc  agcaaccttt      120
actccacctg  cactgctgct  cctgggggct  ccccaggcct  ccctctgcct  ttctacccag      180
tggctgacgg  gatgcctgtc  ttgcctggac  gcaccactgc  tctcctgtcc  ctcaccttgg      240
cttttgctgt  gccctgctct  ggggttgaag  ctggcccatgtgtccccgg  agtcatggct      300
gctcctcctg  ggaggcctct  gtgtgcgtca  cgtcttccac  acctgggggc  agctggcgag      360
cccgtgctct  gttcccctcg  gctgcttggc  acagagytgc  agcctgggay  tctccgtgga      420
cccagactgg  ggattttgcc  aggggggcga  tgggaggagc  aggtgctttg  cctggcggct      480
gtgtctgcat  ttctggacgc  cccagagcac  agaagttgcc  ggcactttga  ggtcttcctc      540
ggcatgtgcc  agattacatg  agtgacggct  gggaatatgt  tttctttttt  gtaatggagg      600
cgtgtttcac  atatagtaaa  gctcaccaaa  aagtaaaaaa  aaaaaaaaaa  aaaaactcg      660
a                                                                          661


<210> 247
<211> 1378
<212> DNA
<213> Homo sapiens

<400> 247
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tcacctcggt  accctggagg  tccaaggccc  ccattgagga  tacctaatca  ggcacttgga      120
ggtgtcccag  gaagtcagcc  attactcccc  agtggaatgg  atccaactcg  acaacaagga      180
catccaaata  tgggtgggcc  aatgcagaga  atgactcctc  caagaggaat  ggtgccctta      240
ggaccacaga  actatggagg  tgcaatgaga  cccccactga  atgctttagg  tggccctgga      300
atgcctggaa  tgaacatggg  tccaggtggt  ggtagacctt  ggccaaaccc  aacaaatgcc      360
aattcaatac  catactcctc  agcatctcct  gggaattatg  taggtcctcc  aggaggtgga      420
gggccaccag  gaacacccat  catgcctagt  ccagcagatt  caaccaactc  tggtgataac      480
atgtatactt  taatgaatgc  agtacctcct  ggacctaaca  gacctaattt  tccaatgggy      501
cctgggtcag  atggtcccat  gggtggatta  ggaggaatgg  agtcacatca  catgaatggc      600
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197

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tctttaggct caggagatat ggacagtatt tccaagaatt ctcccaataa tatgagcctg    660
agtaatcaac cgggcactcc aagggatgat ggcgaaatgg ggggaaattt cttaaatcct    720
tttcagagtg agagttactc ccctagcatg acaatgagcg tgtgatccat taccaagtct    780
cctcatgaaa accacagtga gtcagccctt cacagaacta ctacggaaga aaattattca    840
tcacagtgta cagttaaaca aaggaatctc agtcacacca aaccaacctt tttatttcct    900
gctctctccc ctcttttgtg aagaaagcgg gtccaaatgt gattcaaaca actgtacgga    960
gtggcatatt agaattgccc taaactgaac tgcaaataat tatgtgtgta tgtatatgtg   1020
tgggaaagag aatgtactgt atatgtgtat gttatacaga catatacaca tacatacatt   1080
gacccacagg acattgtaaa atattatcac atgacatctt aagtagaaat aagtagggac   1140
ttttattcca tccttttttt cagtttaca ttttaattat tacaagttgc tcctgccccc   1200
tccctgaact attttgtgct gtgtatatca ctgctttata taagttattt tttaaggtga   1260
actcagatgt tatggttttg taaatgtctg caatcatgga taggaataaa atcgcttatt   1320
tgagagcttt cattaaaaaa aaaaaaaaaa aacttcgagg gggggcccgg taccaat      1378

<210> 248
<211> 1366
<212> DNA
<213> Homo sapiens

<400> 248
ggcacgaggt tttcagcggt attattattt gtgagtctaa cctagcgggt ggtcctggct     60
gtcaccggtg cttgggcggg atcaccacca gcggctgccc gtacttgggc cgccacatga    120
ggacctgggc atcgttggca ttgggcttga ccagggcgct gggcgggatg ggctcattct    180
tgctcaggat tttgggctgg tcctgggcga tgggctcccg cagccgggcg cgctggccca    240
ggggccggtt ggggttcacc tcgatgctga gctgcatgcg ccagtgcagc gtctgcagga    300
tgatcatgtc gttggtggag gtgttggtgg ccaccagcca ggtggtgaag cttggtccc     360
ggtagatgtt ggtgagcttg gccacgttgc tctcgctgac gggcacggcc catgtgacgc     420
tggggtaaaa gttgtcattc atgctgatga tgaacttgga gtccctcttg gtggggccca    480
cgatggtgca ggtctctgtg gtgttgccgt accaggggta gttcaccccg tccggctcgc    540
tgatggcttg gatcttgccc tcctggaggt cggggagctc ccagctggac atgccctgct    600
cgccgtactg gttgtagaac tccatgtggc tgcacgcctg gatccagcca actacccaag    660
tctccttctt ggggatgggc ggcatgacca cctgggccga ggcccggaag tggggtgtcc    720
ggtagcggag caccacgctg gaggactcat cgatgctagt ggggacggg tcgatggagg    780
ctttcacatc aatcaccgtg atcccttccc ggaagactct ggctttgcct ccgatgctct    840
gaatacagcc catggcatac aggagcgctc tgatctccag ggaaggccag cagtcacaga    900
aaaaaccagg cattgaaagg acagaggctg caggacccag tacagacggc gctgctctcc    960
aatctcaact ctcaagaccg atatccatag gatagaaaac tcactgagta gactgggggtt   1020
gcatatatca ctaccgcggc ctgtttataa ataaggattc tgctgcattt catgagccct   1080
gggctctctc ttcttctcct cgcagtggac aaaaatcacc gatattcttt gggttaaaaa   1140
aagtttgtag tttaatgaat aattatgcgg ttctgacatc cgcccttct gtgcctcaca   1200
cgcggggacg gcagctcgca gactctccct gaagtcttcg gaggaagcag gcgagcgccg   1260
gcagactcat aaataaggaa ggctctgtcc ccgcgcggcc gcgccaccct cgcggcagaa   1320
gcctgacttc ctgccctccg gccttccgca cgcgctcccg gcacga                  1366

<210> 249
<211> 715
<212> DNA
<213> Homo sapiens

<400> 249
ggcacgagct ttccctcagt ccaatcttgc aattgctatg tcagtttcag ttcacaataa     60
taccagtgca gacatggctc cttaagattt tctccttttc cctcacgcgg gtcccaattc    120
taaattccca agggctgaca tgattgacat ttgccatagc ctaggaggg agcatttcct    180
tttgtggtct ttccttggtt tgttttattg ggcagtgaat ggcaagtctg tctgtgtttc    240
tttgcttcac cccaaacacc ttggcaaaaa tgaaagcctt ctaatttagc tgtgtcctcc    300
tttacttatg tcaggaagcc tgagccataa cctttgatta aaaaaatttt tttttgtttt    360
ttgtttttga gacgggtct tgctctgtca cccaggctga aatgcagtgg cacgactgca    420
```

198

```
gctcattgca gccttgacct cactggagtg tagtggcatg actgcagctc actgcagtcc      480
caagtagctg gcacttacag gcaggtgcca ccatgcctgg ctaattttta aattttttgt      540
agaaacaggg tcttgctggc tgggcacggt ggctcaacc tgtaatccca gcactttggg       600
aggccaaagc gggcggatca cgaggtcagg agtttgagac cagcctggcc aacatggtga      660
aatcctgttt ccactaaaaa taccaaaaaa aaaaaaaaaa aaaaaaaac tcgta            715
```

<210> 250
<211> 711
<212> DNA
<213> Homo sapiens

<400> 250
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ggcacgagcg aagaccctgt tcggaccctg ccccgattcc agactcaggt agatcgtcgg       60
cataccctct accgtggaca ccaggcagcc ctggggctga tggagagaga tcaggtatcc      120
cccagggagt aggggctacc ttgaggggat gatagacctc ccccactccc agtgkkactc      180
tggaaatatg aaggaactag ggagtggaag agatttaga gctggggaga ggagttcctc       240
ccttcaaagc cagcaactgc ctttggggaa tgtcgggggg tctctccttt ctcctgcttg      300
tgtkargtgg tacacagtcc ccccttcacc tggcgggaag ctgtcccgga cagactcatc      360
tcagctttcc cttggggcag gatcgggggc agcagctcca gcagaaacag caggatctgg      420
agcaggaagg cctcgaggcc acacagdggc tgctggccgg cgagtgggcc ccacccctct      480
ggragctggg cagcctcttc caggccttcg tgaagaggga gagccaggct tatgcgtaag      540
cttcatagct tctgctggcc tggggtggac ccaggacccc tggggcctgg gtgccctgag      600
tggtggtaaa gtggagcaat cccttcacgc tccttggcca tgttctgagc ggccagcttg      660
gcctttgcct taataaatgt gctttatttt caaaaaaaaa aaaaaaaaac t              711
```

<210> 251
<211> 875
<212> DNA
<213> Homo sapiens

<400> 251
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ggcacgagtg ccagtgtccc gtgccctcca gtgtcaaaga tttggggcac tgcccgtcga       60
aatggaaagg ttggtgctca gcctctggag cctcacctgc agggcgtccc cagctaacac      120
ccatccacgc accacctcca ggacgagaac ccttgatgtc aaaaccaagt gcccagtgga      180
ggcggtgaag ctctcggaaa tgctgccacc tgtgtgaggc cgggtctgaa ctcgagggag      240
tcggagctca gctgtcggtt taaagagaca dgagggggac cgggctgccg ccctcagcct      300
gcattcctgt gcgcaatcga ttccgcaatg acagcacctt actccttcct gcggcaggct      360
cacccctgcc tgtgggatgt tgtgagagga acatgagcca gacaaagact tggctcaggg      420
ctccgtggaa caagccagga tgcacgggga gctgggggag cccccascct ggggcagccc      480
agcaggccgc tgaacaaaca ccccagaagc cagcactgtg gcagggtgct ggggagatgc      540
ccctctgagc cttcctcccc cctcagacct gaatgcaccc cacagttggg ggctgcccct      600
gcccactccc ctggtaatgc ataaaagggg aggggaaggt tccctggggc ttgagctccc      660
tctgtggagg tgaggagggg agattccgtt cacatcccag gaggggcaaa atgactgatg      720
tatttttatg tatctacaca gagagtgcat tttctctcca gagatgctgt ctggttaaca      780
aaggaataac ttaagaaatt gattgattat cttaataaac tgtgcaaacc caamrrraaa      840
aaaaaaaaaa aaaaaaaaaa aaaaaaact cgtag                                 875
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<210> 252
<211> 890
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (818)..(819)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (829)..(829)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (859)..(859)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (887)..(887)
<223> n equals a,t,g, or c

<400> 252
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cttgtaaatg tttctttttcc cttaaataca gataattcat ttgtattgct tattttatta      60
tgagctacaa caaaaggact tcaggaacaa gtaatgtatt agtatgttc  aagattgttg     120
ataggaactg tctcaaaagg atggtggtta ttttaaatat aaatagctaa tggggtggt      180
aggcctataa aattaaatgc cttgtataaa atccaaaatg aatgcaaaat tgttttcact     240
tgtattgact ttatgttgta tgattccaat ctctgttctg tttggcactt gtatttaatt     300
cttcacctt  gtaagacatt tgtatattgt ggatgtgttc attcaagcta tttaatatct     360
ggcactgtta atacacagta ctttattgta cagactgttt tactgtttta attgtagttc     420
tgtgtacttt ttttggatgg ggctggcatg ttttctttgt ttcctggcaa tacgacgtgg     480
gaatttcaat gcgttttgtt gtagatgcta acgtgtcagaatcctttaca ttcaactttt     540
ctaagaaaag cattttcagt cttgtagtgt gtgcttacag taactaattt tgttgaaaat     600
ggtttcaagt tattcaaatt tgtacaggac tgtaaagatt tgttgacagc aaaatgttga     660
agaaaaaagc ttatagaata aaagctataa agtatatatt aggatctgca aacaatgaag     720
aattatgtaa tatattgtac aaatgtaagc aaaggctctg aaataaaatg ccatagtttg     780
tgaaaaaaaa aaaaaaaaaa actcgagggg gggcccgnna cccaatcgnc caaaagtgag     840
tcgtattaca attcactgng ccgtcgttta caacgtcgtg actgggnaaa               890
```

<210> 253
<211> 1050
<212> DNA
<213> Homo sapiens

<400> 253
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ggcacgagct tttcagcatt tgatggttgc tgaccactcc cactttcaca gaaccctcat      60
caaacagcct tctatgatcc caaatgcaac tttctatcac attttttatgc tcttcttctg     120
cctactcatg aaaatgttgg ggccatccag gcttccattt ttagccctca ctttgtgcag     180
gtttatactt tattttcagt tttgttatct gatctctgac tccagcccag accattcctg     240
actccacatc cacatattca tctggcttgc tgaataactt ctcttggatg tacatgtgtg     300
ccttagactc attatgtgca gacatgaagt catctttttt ctctccagac ctgcttttcc     360
tctcgtattc ttcttttggg tgaatggtac aattattcag atggaacgtc caagtcaaaa     420
gtcgttctag aatcctccct cactcctaat gccacatcca attagtgacc aaatcctatc     480
gattcggcct tctaaataca gtcaaaacat ttcattcaat tcagcgtcac tgtcattgct     540
ttaatgtaga ccttctctat tttaccatga tcaagcagag gccctgtatc tatattcttc     600
tgccttccag tcttgtcatc ctactccgca gttaatcccc tgagtgctat cctagtgatc     660
cttctaacag tacagatttg gtcatggatt ctccagcttg aaatacttca tgtcttttgt     720
gggaacatgg atggagatgg aggctattat acttagcaaa caaatgcatg aacgaaaacc     780
aaataccaca tgttcttact tataagtggg agctaaatgc tgacaactca tgaacacaaa     840
caaatgaaca gcaaacactg gggtctactt gagggtggag tttgggagga gggagagaag     900
cagaaaggt  aactattggg tactgaactt aatacctggg tgattaaata atctgttcaa     960
caggccccca tgatatgagt ttacctacgt aacaaacctt cacatgtatc cccaaaccta    1020
aaataaaagt taaaaaaaaa aaaaaaaaa                                       1050
```

<210> 254
<211> 1161
<212> DNA
<213> Homo sapiens

<400> 254

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ggggaaacgg agctctgggt gtgatatttc ctctgcattt tcctgtcggg gtggtgaaat     60
aactggtttg aacccagtcc actggactcg aaagctcatg ctcagaagcc ccaggctcc     120
ctctaacttt cttggttgct gcaactcaga gagcgctgga atggacccag ggcatgctcc    180
tcatctcagc ggttcaggtt ttcattcttc tatctccatc cttctattta attctgtact    240
tactaagacc tggggggtaca gggaggggct tggagcctat ttgcccagct gctgaatggg    300
gaggttggag agatggatac ttatggctcc agtaccagga gccaactgtt tcccttgaca    360
actggggaaa ctgaggccca cagagccaag gccacttgcc cgtggttacc taaagatgtt    420
aacgagaaat ccgggtctgg aactcagatc cctttgtatc ctgtttcggt gttggtgtag    480
tttgttgctt tccctaagat gagcccagat agggaaactg aagtgcctgg gstcctggtt    540
gggtcttctg cggggagaga atggcgattc aactcccgtg tactgttgaa cttgacacaa    600
acacgctcac atcccaggct gcatacgtgt tttgctttag aaatgacatg aagcctttg    660
actatttta agagaaaggc aatggctgtg atatttcccc tgcacctccc tctggggcc    720
acttggttaa atgtcaggaa agggagagta tttcctggtc aggaacattc agagcttgct    780
gggagctgaa gttttgtttt ccattaagta ggtattcggg gagtctattt ccctctgcct    840
cctctgtttc cctggaarct tgcgcttgac agttgcaggg aggaggggtt tgagaatgag    900
cagccgagat gcccacgtat cgcgtgcccg ctctaggagt ggcggggtgg ctatttttag    960
ccatcctgat tcagtagagg catttcagcg tttgttcaat atttaattat ccatctgaaa   1020
ttggcccatg tggccttcag tttggaagca gctctctgtg ctgtgatttc ccagttgcat   1080
aaataaggaa gtcaagggaa tctcaatagc cctccaaata ataataaga aaaaaaaaa    1140
aaaaaaactc gacggcacgt a                                              1161
```

<210> 255
<211> 1002
<212> DNA
<213> Homo sapiens

<400> 255

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ggcacgagcc cagcggaagc caagccacca ggcccccccag cgtccacgcg gagcatgaac     60
attgaggatg gcgcgtgccc gcggctcccc gtgcccccccg ctgccgcccg gtaggatgtc    120
ctggccccac ggggcattgc tcttcctctg gctcttctcc ccacccctgg gggccggtgg    180
aggtggagtg gccgtgacgt ctgccgccgg aggggctcc ccgccggcca cctcctgccc     240
cgtggcctgc tcctgcagca accaggccag ccgggtgatc tgcacagga gagacctggc     300
cgaggtccca gccagcatcc cggtcaacac gcggtacctg aacctgcaag agaacggcat     360
ccaggtgatc cggacggaca cgttcaagca cctgcggcac ctggagattc tgcagctgag     420
caagaacctg gtgcgcaaga tcgaggtggg cgccttcaac gggctgccca gcctcaacac     480
gctggagctt tttgacaacc ggctgaccac ggtgcccacg caggccttcg agtacctgtc     540
caagctgcgg gagctctggc tgcggaacaa ccccatcgag agcatcccct cctacgcctt     600
caaccgcgtg ccctcgctgc ggcgcctgga cctgggcgag ctcaagcggc tggaatacat     660
ctcggaggcg gccttcgagg ggctggtcaa cctgcgctac tccaacctgg gcatgtgcaa     720
cctcaaggac atccccaacc tgacggccct ggtgcgcctg gaggagctgg agctgtcggg     780
caaccggctg gacctgatcc gcccgggctc cttccagggt ctcaccagcc tgcgcaagct     840
gtggctcatg cacgcccagg tagccaccat cgagcgcaac gccttcgacg acctcaagtc     900
gctggaggag ctcaacctgt cccacaacaa cctgatgtcg ctgcccccacg acctcttcac     960
gcccctgcac cgcctcgagg gggggcccgg tacccaattc gc                       1002
```

<210> 256
<211> 515
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (3)..(4)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (7)..(7)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (20)..(20)
<223> n equals a,t,g, or c

<400> 256

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tanntgnatc ccccgggcn tgccaggaat tcggcacgag ttacaactgg tggaccacac    60
accaggcact aatcacctgg tgaggatttg gcatatccac caaaaaatgc atccgattta   120
accaacatct ccaccagcgc tacggactcc tcccaattct gacatctctt gcagacaata  .180
ctatgctctc tacacactgt ttagaaatgg aaaggtgatc tgcactgtat cttgggtttg   240
ttggctatgc ttcctttgat gacatatatt atacagbta tatatacata tatttwwwww    300
gttagagttc tagccatttt atttctccgc agggtccttt ctcagacatt actgcatgct   360
gtatatggcg ttagctgtgt gttgatcttc taaaagatga tagagtttac tggtaattgt   420
gtaatcagct cctgcctttt tattttcttg ggttatttac atgtcagaga catttataaa   480
aagtgaaagg ataaaaaaaa aaaaaaaaaa ctcga                              515
```

<210> 257
<211> 1113
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (349)..(349)
<223> n equals a,t,g, or c

<400> 257

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gttggtgttg agcacagctt taggcttaga ttctcatca actaggagaa gctgtgcttc     60
aatacagtta ttcgtttgca tggttcctaa tgtgcttcac tcaatttagc agaatttttt    120
ttttaacctc ttccttgacg ctagctgctt gtgcaaatca catcttggcc gcctactctt    180
cttcacttgc tgacagatgt gtaggtgaga aaagtctcat agtcattgtt cctgaaagaa    420
gcttccagac ccacttctag ggccagtgac atatgcagga aatcagctgc ttctgggcca    300
ggacagagct ggtctttttt ttagtggggg atggcgggca gtggggcang ggacattcaa    360
aatttatttt ccaacagaca gatagcatca gcaggtacaa ctacaagggt atctacatag    420
atcatacatt cacaaggcat tattagttca acagtgagaa agccactcgt gggttttctg    480
taacaatatc ccacttcata gtgtaaacag gtactatttt gttcacttac aattccggaa    540
ggaagggcac accttgcagg ggggaagaaa aggggaatcc taaagtaagg tgcaacaatt    600
aagagacaac actttggcta acaatcttgg atccacattt cagtcagggc cttccacat     660
gaggggaaag actttctct cagaagttag aatctttctt cctcctttct tgttaaactg     720
agagcagtgt tttgtttgct caatattaca tgtacaaaag gagattagaa gaaaatgcat    780
cacaaaacca tcttgaacgt tcagctcttc ctgccaatac atcacaactc ttaggtttta    840
gacggggcct gggaatacgt aagtgttttt tctttttttt tttttaagt gaaagcaagt     900
ttattacgaa agcaaaggga taaaagaatg gctgctccat aggcagagag cagcccagta    960
atcttaaaat aggaaaatag acactatggc tacaaaaaat aaaaaataaa tgaggtagat   1020
aaaattttca cacccaggac ttgcctgttc caacttcata gtcttcatga aattcatc     1080
aagaagacaa aaaaaaaaaa aaaaaccctc gta                                1113
```

<210> 258

<210> 1668
<212> DNA
<213> Homo sapiens

<400> 258
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attttttaaa  tgatccctac  cattttttaa  atgatcccta  ccaaaatgga  aggctggtat    180
cccaaggttt  tgttccattt  ctcaattcta  gtctgtgaaa  ttgargtctg  atgaccactc    240
ttaagrgggc  tgttcattag  ggkgcgggct  gggcattatg  agtgtgtttt  tatgagkca     300
gtggaaggag  gggcttgttg  tgagcagtgc  atgagaaaaa  cggcttggct  ttgcttcttt    360
ttccagctct  gtggccttgg  tcaggttacg  tctcttcagt  atcgtaactg  taatgtggag    420
ataaagcctt  cattagttag  gggcacacac  cgcagtattc  cttaagtcat  cttgatgaca    480
agtgaatgca  aggcagctgg  tacctttcag  gtagtagttg  aattcaggta  gtattgttca    540
gttttttttt  ttcccttcat  gttctaagac  cagctgagag  gcaaagttgt  accactgagc    600
tctagttgtt  gttacctaaa  aagsccttgt  tttaaatttc  tgtgatacct  aagaatttca    660
aatctgggtt  gtcatggatt  ctttattctt  tttttctccc  ttaaaagtt   acattttaga    720
tgaaatcccc  tttyttaaaa  tgggcaaagc  aataattcta  catcatttct  ccccttccct    780
tccacttgtt  tagactaaga  tatgttagag  agggaaaggg  tcgttgtttt  agtaaatact    840
attgctgttg  acatgttaat  actattgctg  ttgacatgtt  tactgatggg  ctgtgttcca    900
taattttgtt  ttaggtcttt  tgtttgaaac  agtttactgt  ttttatcagt  tttggtccct    960
aatttttcct  aacctacagt  ttttctctga  gtacatatgg  tttcattgtt  tgatctactt   1020
tctatctatc  tgaatatgaa  cttctaggat  catgtttatt  ctagtagatg  atgacttaaa   1080
gcctgcagta  taggagggac  aacgtcaact  actgcatgtg  aataacaag   cttgaaggga   1140
agctaaatgt  ttgttacaaa  tttaagacag  tattttaatg  ccgtttgcat  ttttctaaga   1200
attttctata  aagctaattc  tgktattttt  tgtctctaaa  ttagggaact  gtccaggttt   1260
attgctgccg  ggagactaca  ctgcaaaata  gataaagtga  atgaaatagt  agaaaccaac   1320
aggtactctc  atttctcaga  ataagggggc  attcctaaat  tttaaaagta  ggkcaactat   1380
tgkcatggaa  taatgtgact  ggtaaataat  tcattttttc  ttgaatttat  ttatagacct   1440
gatagcaaga  actggcagta  ccaagaaact  atcaagaaag  gagatctgct  actaaacaga   1500
gttcaaaaac  tttccagagt  aattaatatg  taaagcatg   taactaacaa  aggatttgct   1560
ttagagataa  ttatttggaa  tttttatagc  ttacttcaca  atgtgcccag  gtcagctgta   1620
taaaataaat  actgcattgt  tgttaaaaaa  aaaaaaaaa   aactcgta               1668
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<210> 259
<211> 575
<212> DNA
<213> Homo sapiens

<400> 259
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ggcacgagtg  caggaattcg  tgtgccggat  ttggttagct  gagcccaccg  agaggcgcct     60
gcaggatgaa  agctctctgt  ctcctcctcc  tccctgtcct  ggggctgttg  gtgtctagca    120
agaccctgtg  ctccatggaa  gaagccatca  atgagaggat  ccaggaggtc  gccggctccc    180
taatatttag  ggcaataagc  agcattggcc  tggagtcca   gagcgtcacc  tccagggggg    240
acctggctac  ttgcccccga  ggcttcgccg  tcaccggctg  cacttgtggc  tccgcctgtg    300
gctcgtggga  tgtgcgcgcc  gagaccacat  gtcactgcca  gtgcgcgggc  atggactgga    360
ccggagcgcg  ctgctgtcgt  gtgcagccct  gaggtcgcgc  gcagcgcgtg  cacagcgcgg    420
gcggaggcgg  ctccaggtcc  ggaggggttg  cggggggagct  ggaaataaac  ctggagatga    480
tgatgatgat  gatgatggaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa    540
aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaa                                575
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<210> 260
<211> 1532
<212> DNA
<213> Homo sapiens

<220>

203

<220>
<221> misc_feature
<222> (1412)..(1412)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1433)..(1433)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1446)..(1446)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1505)..(1505)
<223> n equals a,t,g, or c

<400> 260
gctggagcgg tttcattgcc tacattccgc attggaaaat agaagcaggc acaatgaagg   60
gaaaaggccg aggcatcagc gtgtgaagac cgcaaagacg atcccgagta cagttgtgaa   120
cagcattgct gctaggctcc tcctgcagat catctgaaat gaacctctct tattgatttt   180
tattggccta gagccaggag tactgcattc agttgacttt cagggtaaaa agaaaacagt   240
cctggttgtt gtcatcataa acatatggac cagtgtgatg gtgaaatgag atgaggctcc   300
gcaatggaac tgtagccact gctttagcat ttatcacttc ctccttact ttgtcttggt   360
atactacatg gcaaatggg aaaggtaagg aaaatgactc ggaaaatgtg catgaaatgt   420
actagggttt ttgcttggtt aaggtgccta aatgcttagg tcaaataccc tggcaatctg   480
catgttacat gctatctgct ggcagtttct ttctgatata aaaatgaaac agtattcttg   540
gacagaggac acagaatttc taattccagt ggggcttgtt ttgctttcag tttcttataa   600
ttgtacttgg agaaacagat actgatcagt gtttatatt ctaaaagaca gccaagttga   660
ataataaaga ctttcgtttt ggcattttgt cttttttact aaacataatt aagtgtttaa   720
taagcttcct tgtaccgagt gttgcataaa acacttaaa ggacacaatt agtgccttcg   780
tgagatttac atgctaatta tgctaaygat tgggtgctat gtagttaatg atttaaactg   840
catgcattga cagattactc cttaggcaaa agtatttaag aagggataag tagaaattct   900
gattggaata ttaaaacatt ttttaaaaat taattatgkt tagactgktg aaccgkgtta   960
tataatttta ggataawgga ttwatttgct tttttttttt ttaagagaaa ctacttgaag 1020
taaattccta cccatacttc ttacttgtct cctttccttt gattaatcta aggaatgktg 1080
atgatgagaa gaaagatgga aatgttgagg tggttgcata tttggtttgt tagaatatct 1140
gtcatcacct gggctwtttg aagctgctgt tgctgatgtt gttttattga ctcatgaaga 1200
caactgaaaa gattgctttg taaccttatt ttttctgat gtgtgtttac atccatgtct   1260
atatatacat attgcatatg tatatatctg tatgtgcatg tatatgttaa aaatctgata 1320
taagtgaaaa catgctctgt gctttgaaac aaaaaaaaaa aaaaaaaact cgagggggggg 1380
cccggtaccc aattcgccct atagtgagtc gnattacaat tcactggccg cgntttacaa 1440
cgtcgngact gggaaaaccc tggcgttacc caacttaatc gccttgcagc acatccccct 1500
ttcgncagct ggcgtaatag cgaagaggcc cg   1532

<210> 261
<211> 1192
<212> DNA
<213> Homo sapiens

<400> 261
ggcacgagaa gaagtgctgt ggaaaccgtc aggccatgaa ccaggctgac cctcggctca   60
gagcagtgtg cttgtggact ctcacatctg cagccatgag cagaggcgac aactgcacgg   120
atctactcgc actgggaatc ccctccataa cccaggcctg gggactgtgg gtcctcttag   180
gggctgtgac gctgctattt ctcatctcgc tggctgcaca cttgtcccag tggaccaggg   240

204

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gccggagcag gagccatccg gggcagggac gctctggaga gtctgtggaa gaggtcccgc   300
tgtatgggaa cctgcattat ctacagacag gacggctgtc tcaagaccca gagccagacc   360
agcaggatcc aactcttgga ggccdgcca gggctgcaga ggaggtgatg tgctatacca   420
gcctgcagct gcggcctcct cagggtcgga tccccggtcc tggaaccccc gtcaagtact   480
cggaggtggt gctggactct gagccaaagt cccaggcctc gggccccgag ccggagctct   540
atgcctcagt atgtgcccag acccgcaggg cccgggcctc cttcccggat caggctatg    600
ccaacagcca gcctgcagcc agctgagatg gagggcctgg cacagcgggg cgtgcactgc   660
cccagccccc cgtagcaggg gcatgactgt ttcccaacca gcacccaaag acgggcgcca   720
ttgccaagtc acaggatgtg atctaccccg gacttcctat ctgagcttca agggagacat   780
ctcagggcaa agctttcgtg atggaggagg caaagacagt agcccccctcc ttatttcttt   840
tttctatctg ttcctcttag cccccaaact cccaggttct cacttccttc ttctggagtt   900
taaccagatc ctccccaccc ccgctccctc atagtctacc cccacgcctc agtgtctcct   960
caggcacagg aagtgggcgg tgggggaggg gtaagggcct gacagtgggtgggtgggtat  1020
attcctcagg agtccacaga ctggagtgga cctggaactt agagacggga gggacccgag  1080
cctggctttt gacctaagaa ccctagcagg agaatacagt ctccatcctg ctgtctctgt  1140
cctgtcccca agttttcaaa taaaactttc caaaaagtga aaaaaaaaaa aa          1192
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<210> 262
<211> 1559
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1445)..(1445)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1551)..(1551)
<223> n equals a,t,g, or c

<400> 262
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atccagcagt ggggagacag cgtgctgggc aggcgctgccgagaccttct cctgcagctc     60
tacctacagc ggccggagct gcgggtgccc gtgcctgagg tcctactgca cagcgaaggg    120
gctgccagca gcagcgtctg caagctggac ggactcatcc accgcttcat cacgctcctt    180
gcggacacca gcgactcccg ggcgttggag aaccgagggg cggatgccag catggcctgc    240
cggaagctgg cggtggcgca cccgctgctg ctgctcaggc acctgcccat gatcgcggcg    300
ctcctgcacg gccgcaccca cctcaacttc caggagttcc ggcagcagaa ccacctgagc    360
tgcttcctgc acgtgctggg cctgctggag ctgctgcagc cgcacgtgtt ccgcagcgag    420
caccaggggg cgctgtggga ctgccttctg tccttcatcc gcctgctgct gaattacagg    480
aagtcctccc gccatctggc tgccttcatc aacaagtttg tgcagttcat ccataagtac    540
attacctaca atgccccagc agccatctcc ttcctgcaga agcacgccga cccgctccac    600
gacctgtcct tcgacaacag tgacctggtg atgctgaaat ccctccttgc agggctcagc    660
ctgcccagca gggacgacag gaccgaccga ggcctggacg aagagggcga ggaggagagc    720
tcagccggct ccttgcccct ggtcagcgtc tccctgttca cccctctgac cgcggccgag    780
atggccccct acatgaaacg gctttcccgg ggccaaacgg tggaggatct gctggaggtt    840
ctgagtgaca tagacgagat gtcccggcgg agacccgaga tcctgagctt cttctcgacc    900
aacctgcagc ggctgatgag ctcggccgag gagtgttgcc gcaacctcgc cttcagcctg    960
gccctgcgct ccatgcagaa cagccccagc attgcagccg ctttcctgcc cacgttcatg   1020
tactgcctgg gcagccagga ctttgaggtg gtgcagcctca ccctccggaa cctgcctgag   1080
tacgctctcc tgtgccaaga gcacgcggct gtgctgctcc accgggcctt cctggtgggc   1140
atgtacggcc agatggaccc cagccgcgca atctccgagg ccctgaggat cctgcatatg   1200
gaggccgtga tgtgagcctg tggcaggaag cgtgggcgtt gctggtctgt ccgaggaggt   1320
gagggcgccg agccctgagg ccaggcaggc ccaggagcaa tactccgagc cctggggtgg   1380
ctccgggccg gccgctggca tcaggggccg tccagcaagc cctcattcac cttctgggcc   1440
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acagncctgc gcggagcggc ggatcccccc gggcatggcc tgggctggtt ttgatgaaa    1500
cgacctgaac tgtcaaaaaa aaaaaaaaaa aaacccgrgg gggggcccgg nacccaatt    1559


<210> 263
<211> 1021
<212> DNA
<213> Homo sapiens

<400> 263
gtaattcctt aaacatacca tctgtcacag ttaatctaga tttgtaaata ggtagtaatt      60
tatagaattt ttaaagcgta aatccggta atattaaaag ataggtaaac ctaggcctgg     120
aaagctgtta tttggctaaa attgcacagg aggccatgaa cagaggcaag tgccccagag     180
actccacttt cattcctaac tgttctcaaa ttaatgctca tgattgagta ttctcagtgc     240
aactcgtaga gtttgataag taaaagttac atgcccctgt tttcctagca tgaattcac      300
tgttatcaaa gacaagaggc agaccattca ttcattctca aaacactgaa tgccattctg     360
tgcctagtgc tatacaaggc atgggagatt cagtgtgaat aagtctttgc tctccaccta     420
acaagggaca gttttaatta tagattgtct tcctattaag tatgagtttt agtaggcatt     480
aaaaatcgta attagtttga taatatgaga cccaacccta acttgccaga agagtaatca     540
gttcatgaac cattgatatt tcctgtatat ttcatgaatg tgacttcagt cattctagtg     600
ttaatactgt ggaatgtcat tggtgtagca acgtgggttc accaaaacac cttttttatac     660
aaaagacaga tgygtgaatt aaagagatta aaggatagag tattctgtt ctttgttttg     720
atttggcttt taggtattaa aataaggccc agatcactaa aaattagtaa cagagggaga     780
cctctaatag atttaaagtc agttaattct ctctgaaatt tgatgttttc ttctataaag     840
aataactcta aaataggcat cttcccagga ctttccattc tcaggaaaag acctagttac     900
gtataaaaaa taacttctac tgctttatgt agtcatatag gtctgcctaa aataagaatt     960
tgtatttaat aaataccaaa attttcaaat ggtaaaaaaa aaaaaaaaa aaaggggggg    1020
c                                                                  1021


<210> 264
<211> 1024
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)..(5)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (14)..(14)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (32)..(32)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (713)..(713)
<223> n equals a,t,g, or c

<400> 264
gtggntcccc cggntggcca ggattcggca cngggcgctg gccgccttcc agctgctcaa      60
cctgactggg caacgtgggg ctcttcctgc gctcggatcc cagcatccgt ggcgtgatgc     120
tggccggccg cggtctgggc cagggctggg cttactgct ccaatgccaa agccaggtgc     180
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cgccacgcag cggacactgc tctgcctgcc gcgtctgcat cctgcgtcgg gaccaccact    240
gccgmctgct gggccgctgc gtgggcttcg gcaactaccg gcccttcctg tgcctgctgc    300
ttcatgccgc cggcgtcctg ctccacgtct ctgtgctgct gggccctgca ctgtcggccc    360
tgctgcgagc ccacacgccc ctccacatgg ctgccctcct cctgcttccc tggctcatgt    420
tgctcacagg cagagtgtct ctggcacagt ttgccttggc cttcgtgacg gacacgtgcg    480
tggcgggtgc gctgctgtgc ggggctkggc tgctcttcca tgggatgctg ctgctgcggg    540
gccagaccac atgggagtgg gctcggggcc agactccta tgacctgggt ccctgccaca    600
acctgcaggc agccctgggg ccccgctggg ccctcgtctg gctctggccc ttcctggcct    660
ccccattgcc tggggatggg atcaccttcc agaccacagc agatgtggga canacagcct    720
cctgactcca ggaagagcca gagctgtgca gggaggaagg ggtgagaggg gggcccccac    870
acctagactc agtaaggaag tcgggttgga ccttaacatc tgcattggac aactccaccc    840
cttccttggc cttgcccctg cccgcctaca ctcctacgtg tccagggctt gggccgtgac    900
ttaggcagag gagtgcagag gagggtctgg cagggctgc tcaggccgcc tagctgcccc    960
tttgccaggt taataaagca ctgacttgt aaaaaaaaaa aaaaaaaaaa aaagggcggc   1020
cgct                                                               1024


<210> 265
<211> 621
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (488)..(488)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (536)..(536)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (539)..(539)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (548)..(548)
<223> n equals a,t,g, or c

<400> 265
acagagtctc gctctgttgt ccagcctggg caacagagaa aacaaaagg aaaacaaatg     60
atgaaggtct gcagaaactg aaacccagac atgtgtctgc cccctctatg tgggcatggt    120
tttgccagtg cttctaagtg caggagaaca tgtcacctga ggctagtttt gcattcaggt    180
ccctggcttc gtttcttgtt ggtatgcctc cccagatcgt ccttcctga tccatgtgac    240
cagactgtat ttgttgggac tgtcgcagat cttggcttct tacagttctt cctgtccaaa    300
ctccatcctg tccctcagga acggggggaa aattctccga atgttttgg ttttttggct    360
gcttggaatt tacttctgcc acctgctggt catcactgtc ctcactaagt ggattctggc    420
tcccccgtac ctcatggctc aaactaccac tcctcagtcg ctatattaaa gcttatattt    480
tgctgganta ctgctaaata caaaagaaag tccaatatgt ttccattctg tagggnaana    540
gggatgcngg cttaaaattc tgagcaaggg ttttttggca gtgcagtgtt ggcactatgg    600
aaaacccttg gtcccccgga a                                             621


<210> 266
<211> 884
<212> DNA
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207

<213> Homo sapiens

<220>
<221> misc_feature
<222> (307)..(307)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (356)..(356)
<223> n equals a,t,g, or c

<400> 266
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tcgacccacg cgtccgccgg atggttgcca cccctcctgc tgtaggatgg aagcagccat    60
ggagtgggag ggaggcgcaa taagacaccc ctccacagag cttggcatca tgggaagctg   120
gttctacctc ttcctggctc ctttgtttaa aggcctggct gggagccttc cttttgggtg   180
tctttctctt ctccaaccaa cagaaaagac tgctcttaa agtggagggt cttcatgaaa    240
cacagctgcc aggagcccag gcacaggctg ggggcctgga aaaaggaggg cacacaggag   300
gagggangga gctggtaggg gagatgctgg gctttaccta agtctcgaaa caaggnggca   360
gaataggcag aggcctctcc gttccaggcc cattttgac aratggcggg acggaaatgc     420
aatagaccag cctgcaaraa aracatgtgt tttgatgaca ggcagtgtgg ccgggtggaa    480
caagcacagg ccttggaatc ccaatggact gaatcagaac cctaggcctg ccatctgtca    540
gccgggtgac ctgggtcaat tttagcctct aaaagcctca gtctccttat ctgcaaatg     600
aggcttgtga tacctgtttt gaagggttgc tgagaaaatt aaagataagg gtatccaaaa    660
tagtctacgg ccataccacc ctgaacgtgc ctaatctcgt aagctaagca gggtcaggcc    720
tggttagtac ctggatgggg agagtatgga aaacatacct gcccgcagtt ggagttggac    780
tctgtcttaa cagtagcgtg gcacacagaa ggcactcagt aaatacttgt tgaataaatg    840
aagtagcgat ttggtgtgaa aaaaaaaaaa aaaaaaaaaa aaac                     884
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<210> 267
<211> 1231
<212> DNA
<213> Homo sapiens

<400> 267
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ggcacgagtg aatgtcgagg agttccagga tctctggcct cagttgtcct tggttattga     60
tgggggacaa attggggatg gccagagccc cgagtgtcgc cttggctcaa ctgtggttga    120
tttgtctgtg cccggaaagt ttggcatcat tcgtccaggc tgtgccctgg aaagtactac    180
agccatcctc caacagaagt acggactgct ccctcacat gcgtcctacc tgtgaaactc     240
tgggaagcag gaaggcccaa gacctggtgc tggatactat gtgtctgtcc actgacgact    300
gtcaaggcct catttgcaga ggccaccgga gctagggcac tagcctgact tttaaggcag    360
tgtgtctttc tgagcactgt agaccaagcc cttggagctg ctggtttagc cttgcacctg    420
gggaaaggat gtatttattt gtattttcat atatcagcca aaagctgaat ggaaaagtta    480
agaacattcc taggtggcct tattcaata agtttcttct gtctgttttg tttttcaatt     540
gaaaagtaat taaataacag attagaatct agtgagagcc tcctctctgg tgggtggtgg    600
catttaaggt caaaccagcc agaagtgctg gtgctgttta aaaagtctca ggtggctgcg    660
tgtggtggct catgcctgta atcccaacat tctgggaggc ccaggcggga gaactgttg     720
agccccagga gttcagaatc agcctgggca acatagcaat actccgtctc ataaaaatta    780
ataaataaaa agtctcaggt gaccaaaggc tcctgaagct agaaccaggt ttggataaag    840
attgaagagc cacaggccac tcttccctct gagccattgg cctagtggt gtcatgtatt     900
gtaattgctc gcagggagag cagtcttttt ggtgtaatag tgggatgtct gcttagttgg    960
cagggttca gtccaaatgg aagaatattg ggaaataaac ctccactatc ctttatagcc    1020
agggactttt ttcctatttta ttcataaaat aaattatagt taattatacc cataacacct   1080
ttatttaaat ccagtgttct ccgcagcctt ttgtctattt atatgtgtaccaagtgttaa    1140
acataattat tattgggcat ttgaactttg ttttttcttta aagaaatgct gctattaaac   1200
atatttgtaa atggaaaaaa aaaaaaaaaa a                                   1231
```

208

<210> 268
<211> 1223
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1204)..(1204)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1206)..(1206)
<223> n equals a,t,g, or c

<400> 268

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gcttagctcg aaattaaccc tcactaaagg gaacaaaagc tggagctcca ccgcggtggc      60
ggccgctcta gaactagtgg atcccccggg ctgywkgaat tcggcacgag ctgctgtctg     120
tgcttcggga tcctgccctc cagaagtcct ccaaggcttg gtacttgctg cgtgtccagg     180
tcctgcagct ggtggcagct taccttagcc tcccgtcaaa caacctctca cactccctgt     240
gggagcagct ctgtgcccaa ggctggcaga cacctgagat agctctcata gactcccata     300
agctcctccg aagcatcatc ctcctgctga tgggcagtga cattctctca actcagaaag     360
cagctgtgga gacatcgttt ttggactatg gtgaaaatct ggtacaaaaa tggcaggttc     420
tttcagaggt gctgagctgc tcagagaagc tggtctgcca cctgggccgc ctgggtagtg     480
tgagtgaagc caaggccttt tgcttggagg ccctaaaact tacaacaaag ctgcagatac     540
cacgccagtg tgccctgttc ctggtgctga agggcgagct ggagctggcc cgcaatgaca     600
ttgatctctg tcagtcggac ctgcagcagg ttctgttctt gcttgagtct tgcacagagt     660
ttggtggggt gactcagcac ctggactctg tgaagaaggt ccacctgcag aaggggaagc     720
agcaggccca ggtcccctgt cctccacagc tcccaagga ggagctcttc ctaagaggcc      780
ctgctctaga gctggtgcca ctgtggccaa ggagcctggc cccatagcac cttctacaaa     840
ctcctcccca gtcttgaaaa ccaagcccca gcccataccc aacttcctgt cccattcacc     900
cacctgtgac tgctcgctct gcgccagccc tgtcctcaca gcagtctgtc tgcgctgggt     960
attggtcacg gcaggggtga ggctggccat gggccaccaa gcccagggtc tggatctgct    1020
gcaggtcgtg ctgaagggct gtcctgaagc cgctgagcgc ctcacccaag ctctccaagc    1080
ttccctgaat cataaaacac ccccctcctt ggttccaagc ctcttggatg agatttggct    1140
aagcatacac actgttgcac tggagggcct gaaccagcca tcaaacgaga gcctgcagaa    1200
ggtncncagt aaggctgaag ttt                                            1223
```

<210> 269
<211> 1494
<212> DNA
<213> Homo sapiens

<400> 269

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ctcgctccgg gagctggtgc agtggctagg cttcgccacc ttcgagatct tcgtgcacct     180
gctggccctg ttggtgttct ctgtgctgct ggcactgcgt gtggatggcc tggtcccggg     240
cctctcctgg tggaacgtgt tcgtgccttt cttcgccgct gacgggctca gcacctactt     300
caccaccatc gtgtccgtgc gcctcttcca ggatggagag aagcggctgg cggtgctccg     360
cyttttctgg gtacttacgg tcctgagtct caagttcgtc ttcgagatgc tgttgtgcca     420
gaagctggcg gagcagactc gggagctctg gttcggcctc attacgtccc cgctcttcat     480
tctcctgcag ctgctcatga tccgcgcctg tcgggtcaac tagcctcacc gaggtgccgg     540
agagggagcg ctggacaact agaatgttga cctcgagccg aggccctact tgcagcgcac     600
cggaggagag gctctctagt ctgaaggcac cgccggcttg cgccgagctg agtgcgggt     660
ttccctattc caatcctgtt tgaaatggtt tcttcagcag ggcttaaaag agcagccttc     720
atcctgaaaa tgtatttcct tttgtttaat gctttgagta gataatcctg aattgaggtc     780
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atgaggaggc cccccaggcc agacagtcct gaacccctct gacacttgga aactgaatat    840
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acaaaggctg caaagctgga ctcaggaatg tcctccaacc agcagcgctg acctaagagc    960
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cagttttgtg gacttttgac caccttgggc tggcactctt agcacacctg agacagattt   1260
aagcctccct aagagactga agagaggaac aggtgtcaga tactcatagg cactgagatc   1320
tacaaatggg aagcttgtga gtggcccatc tttgttggcc tacgaacttt ggtttgatgc   1380
cagtcaggtg ccacatgaga acctttgctg agatgcaaat aaagtaagag aatgttttcc   1440
tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaggggc ggcc           1494


<210>  270
<211>  1216
<212>  DNA
<213>  Homo sapiens


<400>  270
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gagaagtctg cggctgagct gggagcaaat ccccaccccc ctacctgggg gacagggtgc    120
agcggccatg gctacagcaa gaccccctg gatgtgggtg ctctgtgctc tgatcacagc    180
cttgcttctg ggggtcacag agcatgttct cgccaacaat gatgtttcct gtgaccaccc    240
ctctaacacc gtgccctctg ggagcaacca ggacctggga gctggggccg gggaagacgc    300
ccggtcggat gacagcagca gccgcatcat caatggatcc gatgcgata tgcacaccca     360
gccgtggcag gccgcgctgt tgctaaggcc caaccagctc tactgcgggg cggtgttggt    420
gcatccacag tggctgctca cggccgccca ctgcaggaag aaagtttttca gagtccgtct    480
cggccactac tccctgtcac cagtttatga atctgggcag cagatgttcc aggggggtcaa    540
atccatcccc caccctggct actcccaccc tggccactct aacgacctca tgctcatcaa    600
actgaacaga agaattcgtc ccactaaaga tgtcagaccc atcaacgtct cctctcattg    660
tccctctgct gggacaaagt gcttggtgtc tggctggggg acaaccaaga gcccccaagt    720
gcacttccct aaggtcctcc agtgcttgaa tatcaggtg ctaagtcaga aaaggtgcga    780
ggatgcttac ccgagacaga tagatgacac catgttctgc gccggtgaca aagcaggtag    840
agactcctgc cagggtgatt ctggggggcc tgtggtctgc aatggctccc tgcagggact    900
cgtgtcctgg ggagattacc cttgtgcccg gcccaacaga ccgggtgtct acacgaacct    960
ctgcaagttc accaagtgga tccaggaaac catccaggcc aactcctgag tcatcccagg   1020
actcagcaca ccggcatccc cacctgctgc agggacagcc ctgacactcc tttcagaccc   1080
tcattccttc ccagagactg ttgagaatgt tcatctctcc agcccctgac cccatgtctc   1140
ctggactcag ggtctgcttc ccccacattg gctgaccgt gtctctctag ttgaaccctg   1200
ggaacaattt ccaaaa                                                   1216


<210>  271
<211>  859
<212>  DNA
<213>  Homo sapiens


<220>
<221>  misc_feature
<222>  (27)..(27)
<223>  n equals a,t,g, or c


<400>  271
ccgggtcgac ccacgcgtcc ggcagangcg ggactgtcgt ctgggggagc cgcccaggag     60
gctcctcagg ccgaccccag accctggctg gccaggatga agtatctccg gcaccggcgg    120
cccaatgcca ccctcattct ggccatcggc gctttcaccc tcctcctctt cagtctgcta    180
gtgtcaccac ccacctgcaa ggtccaggag cagccaccgg cgatccccga ggccctggcc    240
tggcccactc cacccacccg cccagccccg gccccgtgcc atgccaacac ctctatggtc    300
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210

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acccacccgg acttcgccac gcagccgcag cacgttcaga acttcctcct gtacagacac    360
tgccgccact ttcccctgct gcaggacgtg cccccctcta agtgcgcgca gccggtcttc    420
ctgctgctgg tgatcaagtc ctcccctagc aactatgtgc gccgcgagct gctgcggcgc    480
acgtggggcc gcgagcgcaa ggtacggggt ttgcagctgc gcctcctctt cctggtgggc    540
acagcctcca acccgcacga ggcccgcaag gtcaaccggc tgctggagct ggaggcacag    600
actcacggag acatcctgca gtggacttc cacgactcct tcttcaacct cacgctcaag    660
caggtgcgct ggactggggt cacctgatcg gggccacctg tccttcttgt ccaaattacc    720
actccactcc agcctgggca acaaaagcga aaactccatc tccaaaaaaa taataataat    780
aataataaaa taaaaatcac acaaaggcca aaaaaaaaaa aaaaaaaaa aaaaaaaa    840
aaaaaaaaaa aaaaaaaaa                                                859
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<210> 272
<211> 1238
<212> DNA
<213> Homo sapiens

<400> 272
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ccctcacatc agggaaaatg accttcactg ctgttaacag taatgkgtcc ctttcatttt     60
ctggatcaag ccttctcagc ggtggtctg gatgtgggta aactaaggta aaggggatga    120
tattccacaa actaattatg cacacagaaa atctgtggag cctatcagac cccaagtgtc    180
ttgaaatgtt tgtagaaacc cactaaaatg ccccttctct gggtgtgggc ccttattgca    240
gctgtctcac agcctgagct gtggtacaga gaaatggggg ttctcctttt atttcattt    300
ttttccccca atggcagctt ttctcccgtt gttttacctt cctatttccc aaacagttcc    360
tcttattttg tcttttgcac cagtttctgg aggcccttgt catttcaaaa aggatagtct    420
cttttcttac tctggcaaac ctgtgagtga ttccacaaag atacagtatt acttagctaw    480
ctgaattatg atagaaaag tcctagttag gttcctatat aaagcatttg gaagatgacc    540
ttgttgccct tgaaacttga aaatagggat tctggggtga ggatacaaag acattgtctt    600
gcatatccat aagcaggtct tagagcatta ttccaaactc tagctgtttc agtagttcta    660
tgaggattgc aagtcatagg tgtgtgtggc atatcagtcc atctccctcatctccattct    720
cagtttcttc cccacaaaat ttggaatcaa agctttatg acgtttgcca attgcagaac    780
ttcttcagct aaggttaatt tgacgctatg ataaaactga gagatgtcaa aaagcctctt    840
agaaatttta atcttgaaag actttcagg gtatctcatt ttttaggtgg gggtggcagg    900
tgtatttctt ttttaacaaa taaaaggcat ttaagtaaaa ctaaaatgaa aaaagtaggc    960
cttctgacat tgtgtacttg gtggttctgt ccctctgcct gtaacaaatc tcattttgt   1020
taccaagaac tgtatgaaag aagtaaatcc accccgattc tgtatgatta attccatctg   1080
tgtttgtcat ttctgactgg aaaacttctt actccatacc ttgtcgata tggaggacaa   1140
ataattggat tgtctgataa gtctgccaat aaactatcca gaaatagcaa gtgtaaaaaa   1200
aaaaaaaaaa aaaaaaaaa aaaaaaaaa gggcggcc                            1238
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<210> 273
<211> 1189
<212> DNA
<213> Homo sapiens

<400> 273
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gcgtccgctg ggctggaaca gcacagaacc cacagggctg ccgtccacac tctcccggtc     60
agagtcctgg gaccacatgg ggacgctgcc atggcttctt gccttcttca ttctgggtct    120
ccaggcttgg gatactccca ccatcgtctc ccgcaaggag tggggggcaa gaccgctcgc    180
ctgcagggcc ctgctgaccc tgcctgtggc ctacatcatc acgaccagc tcccagggat    240
gcagtgccag cagcagagcg tttgcagcca gatgctgcgg gggttgcagt cccattccgt    300
ctacaccata ggctggtgcg acgtggcgta caacttcctg gttggggatg atggcagggt    360
gtatgaaggt gttggctgga acatccaagg cttgcacacc cagggctaca caacatttc    420
cctgggcatc gccttctttg gcaataagat aagcagcagt cccagccctg ctgccttatc    480
agctgcagag ggtctgatct cctatgccat ccagaagggt cacctgtcgc ccaggtatat    540
tcagccactt cttctgaaag aagagacctg cctggaccct caacatccag tgatgcccag    600
gaaggtttgc cccaacatca tcaaacgatc tgcttggaa gccagagaga cacactgccc    660
taaaatgaac ctcccagcca aatatgtcat catcatccac accgctggca caagctgcac    720
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tgtatccaca gactgccaga ctgtcgtccg aaacatacag tcctttcaca tggacacacg      780
gaactttgt  gacattggat atcaataagg ccaggcgtgg cggcgattac gtctgtaatc      840
ccaggacttt gggaggccaa ggcgggcaga tcacttcagg ccaggaattc aagagcagcc      900
tggccaatat ggcgaaactc tgtctctact gaaaacaaac aaacaaacaa acaaacaaac      960
aaagaaacaa caaaaattag ccgggtgtgg tggcacacgc ctgtagtccc agctactcag     1020
gaggctgagg cataagaatt gcttgaaccc tggaggcgga ggttgcagtg agctgagatt     1080
gggccaccgc actccagtct gggagacaga gtgagactgt ctcaaaacaa caacaaaaaa     1140
atccctaaca taatctcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa                   1189


<210> 274
<211> 496
<212> DNA
<213> Homo sapiens

<400> 274
tcgacccacg cgtccgaact gacacaatga aactgtcagg catgtttctg ctcctctctc       60
tggctctttt ctgctttta  acaggtgtct tcagtcaggg aggacaggtt gactgtggtg      120
agttccagga caccaaggtc tactgcactc gggaatctaa cccacactgt ggctctgatg      180
gccagacata tggcaataaa tgtgccttct gtaggccat  agtgaaaagt ggtggaaaga      240
ttagcctaaa gcatcctgga aaatgctgag ttaaagccaa tgtttcttgg tgacttgcca      300
gcttttgcag ccttcttttc tcacttctgc ttatacttt  gctggtggat tcctttaatt      360
cataaagaca tacctactct gcctgggtct tgaggagttc aatgtatgtc tatttctctt      420
gattcacttg tcaataaagt acattctgca aaagcaaaaa aaaaaaaaaa aaaaaaaaaa      480
aaaaaaaaaa aaaaaa                                                      496


<210> 275
<211> 3153
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2584)..(2584)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2590)..(2590)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (3153)..(3153)
<223> n equals a,t,g, or c

<400> 275
nggccgtggg tgtacgcggc gcagcgcggc agtcctgatg gcccggcatg ggttaccgct       60
gctgcccctg ctgtcgctcc tggtcggcgc gtggctcaag ctaggaaatg gacaggctac      120
tagcatggtc caactgcagg gtgggagatt cctgatggga acaaattctc cagacagcag      180
agatggtgaa gggcctgtgc gggaggcgac agtgaaaccc tttgccatcg acatatttcc      240
tgtcaccaac aaagatttca gggattttgt cagggagaaa aagtatcgga cagaagctga      300
gatgtttgga tggagctttg tctttgagga ctttgtctct gatgagctga gaaacaaagc      360
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212

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cacccagcca atgaagtctg tactctggtg gcttccagtg gaaaggcat tttggaggca      420
gcctgcaggt cctggctctg gcatccgaga gagactggag cacccagtgt tacacgtgag      480
ctggaatgac gcccgtgcct actgtgcttg gcggggaaaa cgactgccca cggaggaaga      540
gtgggagttt gccgcccgag ggggcttgaa gggtcaagtt tacccatggg ggaactggtt      600
ccagccaaac cgcaccaacc tgtggcaggg aaagttcccc aagggagaca aagctgagga      660
tggcttccat ggagtctccc cagtgaatgc tttccccgcc cagaacaact acgggctcta      720
tgacctcctg gggaacgtgt gggagtggac agcatcaccg taccaggctg ctgagcagga      780
catgcgcgtc ctccgggggg catcctggat cgacacagt gatggctctg ccaatcaccg      840
ggcccgggtc accaccagga tgggcaacac tccagattca gcctcagaca acctcggttt      900
ccgctgtgct gcagacgcag gccggccgcc aggggagctg taagcagccg ggtggtgaca      960
aggagaaaag ccttctaggg tcactgtcat tccctggcca tgttgcaaac agcgcaattc     1020
caagctcgag agcttcagcc tcaggaaaga acttcccctt ccctgtctcc catccctctg     1080
tggcaggcgc ctctcaccag ggcaggagag gactcagcct cctgtgtttt ggagaagggg     1140
cccaatgtgt gttgacgatg gctgggggcc aggtgtttct gttagaggcc aagtattatt     1200
gacacaggat tgcaaacaca caaacaattg gaaagagca ctctgaaagg ccattttta     1260
agcattttaa aatctattct ctcccccttt ctccctggat gattcaggaa gctgacattg     1320
tttcctcaag gcagaatttt cctggttctg ttttctcagc cagttgctgt ggaaggagaa     1380
tgctttcttt gtggcctcat ctgtggtttc gtgtccctct gaaggaaact agtttccact     1440
gtgtaacagg cagacatgta actatttaaa gcacagttca gtcctaaaag ggtctgggag     1500
aaccagatga tgtactaggt gaagcattgc attgtgggaa tcacaaagca aatagtactc     1560
cagaaagaca aatatcagaa gcttcctatt ctttttttt ttttttttt tttgagacag     1620
ggtctttctc tgttgcccag gctagagtgc actggtgatc acggctcact ctagccttga     1680
attcctgggc ccaagcaatt ctcccacctc agcctcctga gtagctggga ctacaagtgt     1740
gcaccaccat gcctggctaa ttttttgaat ttttgtagtg atgggatctc gctctgttgc     1800
ccagggtggt ctcgaactcc tggcctcaag cgatcctccc acctcgacct cccaaagtg     1860
tgggattaca ggtgtgagcc acctcgcctg gccccccttc tccatatgcc tccaaaaaca     1920
tgtccctgga gagtagcctg ctcccacact gtcactggat gtcatgggc caataaaatc     1980
tcctgcaatt gtgtatctca gacatttgtg tctttgatcc tcaccctgtg accctaaagg     2040
gaagaaagcc tgagtgtcaa gtaactctgg gcctccccta aagagaaatg gagatggtgg     2100
ctcatctagg aagtagagga gcaggggtt cctggttctc aggccacgtg tgatctctgc     2160
ccacccaggg cctgccccag cctgcaggta ttgctgtgtg gtgggaacac ccacttccct     2220
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cagaggccgg agggcatagg ggtctcggat gacgatctcc cgggtcacag gcttcacccg     2580
gcgntactgn tagtagatcc gcactgaagc cagcacggtc agagcgatca ccttgaactt     2640
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caaggcctct tccgctgtgt agcggttctg gggttgcacc accaggaatc gggagaccag     2760
gtccttcacg gtgtccgagt aatcatccca ctcgggcgag ccaaactggt agttgccgct     2820
catgatcatc ctcagcatca gcatctgctt ccggtgccag aagggcgggg agccggccag     2880
cagcgtgtac atgatgacgc cagtgctcca catgtccacc tctttcccgt agcccgggtg     2940
gtcctcattc atggagcact cgataatctc aggggccagg taactggggg tcccgcagac     3000
ctctcgcagc ctctctcccg gctccagctg gcaggaaaag ccaaagtctg tgagcttgat     3060
gttcatgttg tcatccaaga gaatgttctc gggcttcagg tccggtgca cgatgttgag     3120
tttgtgcaag gtgcagatca cctccagcag agn                                 3153

<210> 276
<211> 686
<212> DNA
<213> Homo sapiens

<400> 276
tcgacccacg cgtccgaact gccaaaagct ggtgattctg ggacaggcct tcactttgga       60
gccacgggat ggggtggggg agccccatgg gcctgggaag gagggtgctg tggagggggc      120
tgcagggctg accagcaggc agcctcatct ggtcggggc ggggcggca ggagcagaag      180
```

213

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cggggtctcc gtccttggga ctgtcctggt tggccacggg ccctgaggat gcacggtgcc     240
tggggctcct gtgccggtgg gcggggggca tgctggcctc tggcgatca ggcgaggcca      300
gcgagggtgt gcttgcaaat tcaagcaata agaggggggt tcctggggggc ttccagccca    360
ggctagaagc ccccatggct tctggcagct ggacatcagc cccaggtatt ggggtgattt     420
tggtcatgac agtgtgcctg tcccactgtt acacgcatga atgggggtta tggggtgggg     480
gtgggactca aggcttgacc gactcctagt ggacctgatg tgaaattcct gtcaaacaaa     540
caccactttt caatggtttg ctaggagtat ttctgtattg aaagtttcta attatgcttt     600
ttaaaaaaat actaaaaata aaggttcaag ctgccaaaaa aaaaaaaaaa aaaaaaaaaa      660
aaaaaaaaaa aaaaaaaaaa aaaaaa                                          686


<210> 277
<211> 2352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 277
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tcccagccag gattccgcgc gccccttcac gcgccctgct cctgaacttc agctcctgca     120
cagtcctccc caccgcaagg ctcaaggcgc cgccggcgtg gaccgcgcac ggcctctagg     180
tctcctcgcc aggacagcaa cctctcccct ggccctcatg ggcaccgtca gctccaggcg     240
gtcctggtgg ccgctgccac tgctgctgct gctgctgtg ctcctgggtc ccgcgggcgc      300
ccgtgcgcag gaggacgagg acggcgacta cgaggagctg gtgctagcct tgcgttccga     360
ggaggacggc ctggccgaag cacccgagca cggaaccaca gccaccttcc accgctgcgc     420
caaggatccg tggaggttgc ctggcaccta cgtggtggtg ctgaaggagg agacccacct     480
ctcgcagtca gagcgcactg cccgccgcct gcaggcccag gctgcccgcc ggggatacct     540
caccaagatc ctgcatgtct tccatggcct tcttcctggc ttcctggtga agatgagtgg     600
cgacctgctg gagctggcct tgaagttgcc ccatgtcgac tacatcgagg aggactcctc     660
tgtctttgcc cagagcatcc cgtggaacct gagcggatt acccctccac ggtaccgggc      720
ggatgaatac cagcccccccg acggaggcag cctggtggag gtgtatctcc tagacaccag     780
catacagagt gaccaccggg aaatcgaggg cagggtcatg gtcaccgact tcgagaatgt     840
gcccgaggag gacgggaccc gcttccacag acaggccagc aagtgtgaca gtcatggcac     900
ccacctggca ggggtggtca gcggccggga tgccggcgtg gccaagggtg ccagcatgcg     960
cagcctgcgc gtgctcaact gccaagggaa gggcacggtt agcggcaccc tcataggcct    1020
ggagtttatt cggaaaagcc agctggtcca gcctgtgggg ccactggtgg tgctgctgcc    1080
cctggcgggt gggtacagcc gcgtcctcaa cgccgcctgc cagcgcctgg cgagggctgg    1140
ggtcgtgctg gtcaccgctg ccggcaactt ccgggacgat gcctgcctct actccccagc    1200
ctcagctccc gaggtcatca cagttggggc caccaatgcc caggaccagc cggtgaccct    1260
ggggactttg gggaccaact ttggccgctg tgtggacctc tttgccccag gggaggaat    1320
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tgctgcccac gtggctggca ttgcagccat gatgctgtct gccgagccgg agctcaccct    1440
ggccgagttg aggcagagac tgatccactt ctctgccaaa gatgtcatca atgaggcctg    1500
gttccctgag gaccagcggg tactgacccc caacctggtg gccgccctgc cccccagcac    1560
ccatgggca ggttggcagc tgttttgcag gactgtgtgg tcagcacact cggggcctac    1620
acggatggcc acagccatcg cccgctgcgc cccagatgag gagctgctga gctgctccag    1680
tttctccagg agtgggaagc ggcggggcga gcgcatggag gccaaggggg aagctggt     1740
ctgccggggcc cacaacgctt ttgggggtga gggtgtctac gccattgcca ggtgctgcct   1800
gctaccccag gccaactgca gcgtccacac agctccacca gctgaggcca gcatggggac    1860
ccgtgtccac tgccaccaac agggccacgt cctcacaggc tgcagctccc actgggaggt    1920
ggaggacctt ggcaccaca agccgcctgt gctgaggcca cgaggtcagc ccaaccagtg    1980
cgtgggccac agggaggcca gcatccacgc ttcctgctgc catgccccag gtctggaatg   2040
caaagtcaag gagcatggaa tcccggcccc tcaggagcag gtgaccgtgg cctgcgagga   2100
gggctggacc ctgactggct gcagtgccct ccctgggacc tcccagtcc tggggggccta   2160
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214

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cgccgtagac aacacgtgtg tagtcaggag ccgggacgtc agcactacag gcagcaccag    2220
cgaagaggcc gtgacagccg ttgccatctg ctgccggagc cggcacctgg cgcaggcctc    2280
ccaggagctc cagtgacagc cccatcccag gatgggtgtc tggggagggt caagggctgg    2340
ggctgagctt ta                                                        2352


<210> 278
<211> 1105
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (797)..(797)
<223> n equals a,t,g, or c

<400> 278
gggggaaaaa aggacacgtt gaattctgtt gctttaaatg taattttttt tattgtgcta     60
aaatgcacag aacataaaat ttgccattag taacactgag tacattcaca gtgtcgtgca    120
accatcagca ctgtctagcg ccagaacttt ttcatcaccc caaagggaaa ccccgtatcc    180
atgaaggact cactccccat tcgccctctc cagcccttgg cagccaccag aatgctttct    240
gtctccataa attcattttt aataagtgca attctgtgtg actttaaaat aaataaacat    300
gagcacgatg agttgcttat tggaaggata tccatgcggg gaggccggcg tgtggagtgc    360
gtargcctcc ggacgggcag gagttgaagg ggcgtggatg tgccgccctc tcctcccctt    420
gctctttcct tggggtcact gcctgagtat ccctcttgc aaatggcccc aaataatgtc     480
tcagcccccca cgtctgcatc gcctcctagc ttcaggaccc tccaccaaaa aacattccaa    540
gcttcagact cactcctggg aaaattccaa tggcctcact ctcccttttg agccagccag    600
atcccatggc ctgtggcggg ctgcctttga gtcctgagca cctgtgagyt agggaagcag    660
gacaggcaca cccagggaag gggaagagtc gtcgtcagtc acagtaattg atatctttgg    720
aatcgtctaa gagatactta gcgtgtgcct aaaacattca tttctttttt tgtttgtttt    780
ttgwgacgaa gtctcgntct gtcgcccagg ctggagtgca gtggcgtgat ctcagctcac    840
cgcaacctcc tcctcccggg ttcaagcgat tctcctgcct cagcctcctg agtggctggg    900
actgcaggca cacactacca cgcctggcta gttttttgta twtttagkgg agacggggtt    960
tcactatgtt ggccaggctg gtctcaaact cctgacctcg tgatctgcct acctcggcct   1020
cccaaagtgg tgggattaca ggcatgagcc actgcaccca gccaactagt cttaaaaaaa   1080
aaaaaaaaaa aaaaagggcg gccgc                                         1105


<210> 279
<211> 2496
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2340)..(2340)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2373)..(2373)
<223> n equals a,t,g, or c

<400> 279
ggccttacct actagcggaa tcgactgaag agacgcctgc cagtgcggga ggtaggaagc     60
tcgatccccca aagaaaagag cgagtgggca ggcagctgcg agacagaacc ggagtgtgca    120
gggtccctag aggccggttc ctggtctgtg ctgctctcct ggaagccatg gacaggcag    180
agctcagggc gatccccagg tgagggcagc ggctctgcct gggattccac cgcagtacaa    240
ccgggtagat gcggggtgga gaagaaagga tgttgcctgc actgctcgcc aatagcaccc    300
```

215

```
tgagaggcta catttgcaga agcagcagca gcagaagaca cagcgccggt ccaggaggcg      360
gctcgagctg ttcgtaaagt cgcccgacag cttttttctcc gtagtatgcg agttgacaaa      420
acagccagag aacagggctc cccattacaa tcttttcgag atctttttccc ttgctaaccg      480
gatctgattt gtgcgaaaac atgccttgca cttgtacctg gaggaactgg agacagtgga      540
ttcgaccttt agtagcggtc atctacctgg tgtcaatagt ggttgcgtt ccctatgcg       600
tgtgggaatt acagaaactg gaggttggaa tacacaccaa ggcttggttt attgctggaa      660
tcttttttgct gttgactatt cctatatcac tgtgggtgat attgcaacac ttagtgcatt      720
atacacaacc tgaactacaa aaaccaataa taaggattct ttggatggta cctatttaca      780
gtttagatag ttggatagct ttgaaatatc ccggaattgc aatatatgtg gatacctgca      840
gagaatgcta tgaagcttat gtaatttaca actttatggg attccttacc aattatctaa      900
ctaaccggta tccaaatctg gtattaatcc ttgaagccaa agatcaacag aaacatttcc      960
ctcctttatg ttgctgtcca ccatgggcta tgggagaagt atgctgtttt aggtgcaaac     1020
taggtgtatt acagtacaca gttgtcagac ctttcaccac catcgttgct ttaatctgtg     1080
agctgcttgg tatatatgac gaagggaact ttagcttttc aaatgcttgg acttatttgg     1140
ttataataaa caacatgtca cagttgtttg ccatgtattg tctcctgctc ttttataaag     1200
tactaaaaga agaactgagc ccaatccaac ctgttggcaa atttctttgt gtaaagctgg     1260
tggtttttgt ttcttttggg caagcagtag ttattgcttt gttggtaaaa gttggcgtta     1320
tttctgaaaa gcatacgtgg gaatggcaaa ctgtagaagc tgtggccacc ggactccagg     1380
attttattat ctgtattgag atgttcctcg ctgccatgc tcatcattac acattctcat     1440
ataaaccata tgtccaagaa gcagaagagg gctcatgctt tgattccttt cttgccatgt     1500
gggatgtctc agatattaga gatgatattt ctgaacaagt aaggcatgtt ggacggacag     1560
tcaggggaca tcccaggaaa aaattgtttc ccgaggatca agatcaaaat gaacatacaa     1620
gtttattatc atcatcatca caagatgcaa tttccattgc ttcttctatg ccaccttcac     1680
ccatgggtca ctaccaaggg tttggacaca ctgtgactcc ccagactaca cctaccacag     1740
ctaagatatc tgatgaaatc cttagtgata ctataggaga gaaaaaagaa ccttcagata     1800
aatccgtgga ttcctgaaca gtatggaaaa gcaaactgtg caactactac attatatcat     1860
tacctggtat cccatggatt ttgtgcttgg gacagaccat aaatgatgga aaatgtcaac     1920
acaaaaatag ctgaaagcca ggtacaacta ctgcatttat atatgtaagt tttgtatatc     1980
aaaaataatt ggtctaaatt tcctagactt agacttgatt tcttaacatt agggtatcgc     2040
atactcaaat ggtagacaat gaccccaact aaatcttcct gatgttacac tgctttatca     2100
agaggatgga ctttttttttt ttgaggcaga cagagtcttg gctctgtcac ccaggctgga     2160
gtgcagtggc gcaatctcgg gtcactgcaa gctctgcctc ccaagttcat gccattctcc     2220
tgcctcagcc tcccaagtag ctgcgactac aagcacctgc caccatgccc agctaatttt     2280
ttttttcagt agagacaggg tctcaccatg ttagccacga tgctcttgat ctgaccttgn     2340
gatcccgcga cctcggcctt ccaaagtgct ggnaatacag gcgtgagcca ctgggccttg     2400
ccaagattgg cacttttta acatcagaac ttcctatcac tgctgcattg agttgtccg      2460
catttattag aagcattatg cctgtacgga ttgggg                               2496
```

```
<210> 280
<211> 549
<212> DNA
<213> Homo sapiens

<400> 280
tcgacccacg cgtccgggct gacatgatgt atttctgcca gatgctggca gttgtggaaa       60
ctatcaatgc agcaattgga gtcactacgt caccggtgct gccttctctg atccagcttc      120
ttggaagaaa ttttattttg tttatcatct ttggcaccat ggaagaaatg cagaacaaag      180
ctgtggtttt ctttgtgttt tatttgtgga gtgcaattga aattttcagg tactctttct      240
acatgctgac gtgcattgac atggattgga aggtgctcac atggcttcgt tacacttgt      300
ggattccctt atatccactg gggatgtttg gcggaagctg tctcagtgat tcagtccatt      360
ccaatattca atgagaccgg acgattcagt ttcacattgc catatccagt gaaaatcaaa      420
gttagatttt cctttttttct tcagatttat cttataatga tattttaggg ttatacata      480
aattttcgtc accttttataa acagcgcaga cggcgctatg gacaaaaaaa aaaaaaaaaa      540
aaaaaaaaa                                                               549
```

```
<210> 281
<211> 1001
```

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (919)..(919)
<223> n equals a,t,g, or c

<400> 281
cgcgctggaa ccctgtggcg gcggccatgg ccatatggcg ctgcccgcct ggctgcagcc      60
aggtatagga agaatgcgta tcttttcatc tattacttaa tccagttctg tggccactct     120
tggatattta caaatatgac agtcagattc ttttcatttg gaaaaggtaa aactccgaaa     180
cagttttttt attttttaact tttaatcctt gttttcacct catcctgctt atattaaatt    240
tctacacacc tcaaccttct accacgggat acagattcaa tggttgacac ttttttatgct    300
attggacttg tgatgcgact ttgccaatcc gtatctctcc tggaactgct gcacatatat     360
gttggcattg agtcaaacca tcttctccca aggtttttgc agctcaaga aagaataatc      420
atcctttttg tggtgatcac cagtcaagag gaagtccaag agaaatatgt ggtgtgtgtt     480
ttattcgtct tttggaatct attggatatg gttaggtaca cttatagcat gttatcagtc     540
ataggaatat cctatgctgt cttgacatgg ctcagtcaaa cactatggat gccaatttat     600
cctttgtgtg ttcttgctga agcatttgcc atctatcaat cgctgcctta ttttgaatca     660
tttggcactt attccaccaa gctgcccttt gacttatcca tctatttccc atatgtgctg     720
aaaatatatc tcatgatgct ctttataggt atgtatttta cctacagtca tctatactca     780
gaaagaagag acatcctcgg aatctttccc attaaaaaaa gaagatgtg aagtacagca      840
ttccagtgtg acacgagaaa agacaggctg tggattcagt gcagtaaata aaacacagga     900
agtattctgg tggaaaaana aaaaaaaaaa aaaaaaaar aaraaaaaa aawaaaaaa        960
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa a                         1001

<210> 282
<211> 1432
<212> DNA
<213> Homo sapiens

<400> 282
acgagagatt taagtgcagc gtggattttt tttttctcac tttgccttgt gttttccact      60
ccgaaagaat gttgtggctg ctcttttttc tggtgactgc cattcatgct gaactctgtc     120
aaccaggtgc agaaaatgct tttaaagtga gacttagtat cagaacagct ctgggagata     180
aagcatatgc ctgggatacc aatgaagaat acctcttcaa agcgatggta gctttctcca     240
tgagaaaagt tcccaacaga gaagcaacag aaatttccca tgtcctactt tgcaatgtaa     300
cccagagggt atcattctgg tttgtggtta cagacccttc aaaaaatcac acccttcctg     360
ctgttgaggt gcaatcagcc ataagaatga acaagaaccg gatcaacaat gccttctttc     420
taaatgacca aactctggaa tttttaaaaa tcccttccac acttgcacca cccatggacc     480
catctgtgcc catctggatt attatatttg gtgtgatatt ttgcatcatc atagttgcaa     540
ttgcactact gattttatca gggatctggc aacgtagaag aaagaacaaa gaaccatctg     600
aagtggatga cgctgaagat aagtgtgaaa acatgatcac aattgaaaat ggcatcccct     660
ctgatcccct ggacatgaag ggagggcata ttaatgatgc cttcatgaca gaggatgaga     720
ggctcacccc tctctgaagg gctgttgttc tgcttcctca agaaattaaa catttgtttc     780
tgtgtgactg ctgagcatcc tgaaatacca agagcagatc atatattttg tttcaccatt     840
cttctttgt aataaattt gaatgtgctt gaaagtgaaa agcaatcaat tatacccacc      900
aacaccactg aaatcataag ctattcacga ctcaaaatat tctaaaatat ttttctgaca     960
gtatagtgta taaatgtggt catgtggtat ttgtagttat tgatttaagc attttttagaa   1020
ataagatcag gcatatgtat atattttcac acttcaaaga cctaaggaaa aataaatttt    1080
ccagtggaga atacatataa tatggtgtag aaatcattga aaatggatcc tttttgacga    1140
tcacttatat cactctgtat atgactaagt aaacaaaagt gagaagtaat tattgtaaat    1200
ggatggataa aaatggaatt actcatatac agggtggaat tttatcctgt tatcacacca    1260
acagttgatt atatatttc tgaatatcag cccctaatag acaattcta tttgttgacc      1320
atttctacaa tttgtaaaag tccaatctgt gctaacttaa taaagtaata atcatctctt    1380
tttgattgtg aaaaaaaaaa aaaaaaaaa aaaaaaaaaa aaaaaaaaa aa               1432
```

217

<210> 283
<211> 1048
<212> DNA
<213> Homo sapiens

<400> 283
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ccacgcgtcc ggcagtgaac actctttgct aaatttctga ctgaatccaa gatttttcct    60
tagaatagat tcttaaaagt gggggccagg tgcggtggct cacacctata atcccagcac   120
cttgggaggc cgaggtggcc agatcattga ggtcaggagt ttgaaaccag cctggccaac   180
atggtgaaac cccgtctcta ctaaaaatac aaaaattagc caggtgtgtg gggcgtgcgc   240
ctgtagtccc agctacttgg gaggctgagg caggagaatc gcttgagcct gggaagcaga   300
ggttgcatgg gccgggatca cgccactgca ctccagcctg ggtgacagca agactccatc   360
taagaaaaca aaaaaaaaaa gtacgattgg tgcgccagag tgaacacaaa atgtaaagac   420
ttgtgtattt gtgagaccct tttgaagcat gctatctccc cagctacacc ctcttcaggt   480
gcccccttccc tgcctcctcc tgcttttcac actgtggctc gtggttccag gctaagcac   540
ggacatcagt gaggactggg agaaagactt tgacttggac atgactgaag aggaggtgca   600
gatggcactt tccaaagtgg atgcctccgg ggaggtgagt gggcctggtg ggtcagaggg   660
aagcgagcct aatggtcctg ggtgtgagag ctctccccag ccagcccagc tgtcccctca   720
ggagggtccc tgctcctgtc tgaggtgaca ggtggtggga aaggagctgg agcttcctgc   780
tcagacccac aacattggtc atcagcaggc tgcactttc ctcagttcca gggtggatag   840
agggtcaagt tcttgacctt agctctgtat caaaattgcc tgagaaactg cttaagaaaa   900
cagatgtcat gctgagcacg gtggctcaca cctgtaatcc caacactg ggaggccaag   960
gtgggaggat tgcttgaggc gaggagttca agaccagcct ggccaatata gtgagacccc  1020
atttctgttt ttgaaaaaaa aaaaaaaa                                     1048
```

<210> 284
<211> 1021
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (971)..(971)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1004)..(1004)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1008)..(1008)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1010)..(1010)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1018)..(1018)
<223> n equals a,t,g, or c

<400> 284

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ggccgccctt  tttttttttt  tttttttttt  ttttttttttt  ttttggcctt  agtcatcatt        60
tcttgaataa  tacaaatagg  taagacaatt  ttacaaaaat  tgtgctatag  aataggatt        120
ttgtgacttt  ttagatgaaa  tattagagct  accccaccca  gccacagata  gcactgtaac       180
actttcttaa  tagagtatag  gttcaaatta  taaagtccac  acactggcta  aaaagttcaa       240
gttcagagtt  tcaatcaatt  ttcattgtaa  ggatgaaact  gagttttact  caacttgtgt       300
cttttaaga  gaatgggcca  cctcccacac  atcctttctc  ttggactttt  tttaacactt       360
ctaatgttct  gtatcacgaa  atcagatggc  caaaacaaaa  tctacaggtg  cttttaaaaaa      420
gcaagtcccc  aagtgattgt  tacccatacc  aaaatgagaa  ttgctgctat  aatctgttct       480
tactggamtg  gccakgccaa  tcttgggact  aggattaaat  tgcaattaaa  tckgcagtg       540
tacaaaattt  ttgtcagtct  gyctagaaaa  agaaagagaa  ctctttcatg  gtagagcagt       600
tactgtgctc  acgttgcttt  ttctaaaaac  caacctactt  tcaaacaaag  aatgaggaaa       660
tttgcagtaa  attttaaata  tgagtcacgg  aaatattaag  ataatagcat  gtgtgggcaa       720
taataagtat  gccaagaaat  aaagagtaat  atacaaaca  atcaaacatt  attacatttg       780
gctacgaggt  tcctaataaa  cagggcaaaa  taaatagtga  aatataataa  aatcgttatc       840
atctgataaa  aggctgcatg  gtacttttcc  caaacgtaat  ggatgacttc  aacacatttt       900
cttattaaat  atttcaaatt  gtttcttcat  gtgaaaactg  tcttattaat  tgtaaaaagg       960
atgtaacttg  nataggcatg  ctcaacaggg  gtaagagtaa  ttcngtangn  gccccctnga      1020
t                                   .                                       1021
```

<210> 285
<211> 1492
<212> DNA
<213> Homo sapiens

<400> 285

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gccttcccac  actccattcc  ctgtcaagtt  atggctgtcc  cctcacccca  gctgctccta        60
gagaggccct  tkttacctgt  gtcattcatg  tttctaacaa  gccaccctcc  accccgtctt       120
gtgtgcccca  tgcacctgtg  catctgtgct  gtgtgggtgt  tggtggccct  tttgcgcatg       180
catggggcat  cccctgccca  gaccagcggg  acaaggagcg  ggaacgcgg  ctgcaggagg       240
cacggggccg  gccaggggag  gggcgcggca  acacagccac  tgagaccacc  acgaggcaca       300
gccagcgggc  agctgatggc  tctgctgtca  gcactgttac  caagactgag  cggctcgtcc       360
actccaatga  tggcacacgg  acggcccgca  ccaccacagt  ggagtcgagt  ttcgtgaggc       420
gctcggagaa  tggcagtggc  agcaccatga  tgcaaaccaa  gaccttctcc  tcttcctcct       480
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gcctggcggc  gctcgagaaa  cggcaggccg  agaagaagaa  agagctgatg  aaggcgcaga       600
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gcggctacga  gcacgtcgac  atccagaact  tctcctccag  ctggagtgat  gggatggcct       840
tctgtgccct  ggtgcacaac  ttcttccctg  aggccttcga  ctatgggcag  cttagccctc       900
agaaccgacg  ccagaacttc  gaggtggcct  tctcatctgc  ggagacccat  gcggactgcc       960
cgcagctcct  ggatacagag  gacatggtgc  ggcttcgaga  gcctgactgg  aagtgcgtgt      1020
acacgtacat  ccaggaattc  taccgctgtc  tggtcagaa  ggggctggta  aaaaccaaaa      1080
agtcctaamc  cctgctcggg  gccccacgga  tgctggtgga  ctgtgtgccc  ctggtggagg      1140
tggacgacat  gatgatcatg  ggcaagaagc  ctgaccccaa  gtgtgtcttc  acctatgtgc      1200
agtcgctcta  caaccacctg  cgacgccacg  aactgcgcct  gcgcggcaag  aatgtctagc      1260
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cctgcctgtg  cgtccgccca  ccgctgccct  gtctgttgcg  acaccctccc  ccccacatac      1380
acacgcagcg  ttttgataaa  ttattggttt  tcaamraaaa  aaaaaaaaa  aaaaaaaaaa      1440
aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaa  ag             1492
```

<210> 286
<211> 1543
<212> DNA
<213> Homo sapiens

<400> 286

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ggcacgagat ttgattctca tgctcctttc aaaagagcat actagtttgg ggtggttggt      60
tattttctta accttagcaa gccagcttat ttcctatgga agcagaactg gaaacagcag     102
atgtccacca tgcttataca ggacactaca cactgtctcg acaagccatg ttctttcctc     180
cctcttcgtg agcactttct ctggtgatga gttagtatgg actacttgaa cctcaaaact     240
gggcctctca cccaaagcca aatgaagtag cgtatgccag gatgatgttt cttttgggcc     300
gttggcagtg agactgctaa gcaggctgcc ttaggttttg ctgtggcaat gctagcagat     360
tgttccctct ttcaaagggg caaaaatatc attttggtat gataactgac tttctattta     420
cagtttctgg ccccccaaaga caaaccaagt ggagacacag cagctgtatt tgaagaaggt     480
ggtgatgtgg acgatttagt aagtactttt aatatgcacc tggtgttctg tgattgaagt    540
cacctgagct gtaaatacag ccacaaaggc tgattatctt acacttgttg cttatttgtg     600
ttttaatttc caatacacca gaagcttcct acaccattat atattgccat tataaattca     660
atcagatagg taatttcata atagaaattc ctgtgtttca tggtgtcggc tatattgttc     720
attcagatta atcctctccc ttgaagggct gaaaaagact agggagctat tccattagta     780
gcaaaatgtt gtaattcact gaaattgctg ttaaccaaaa ataagtaata caacatggca     840
ttttgtgtgg gttgacaaat gaaacaggcc ttaaaagggc tacttcttaa atgttctcaa     900
ttaacttaat gtaaacaaaa tagaccgata ggcatttgag gatttctgga cccattaca     960
ccatgttgtt gatgtctggg aagctgtgta gtaaatgtct tttgtatcta tccttaatgt    1020
ttggaaactt cccgccttta agcttcatat gacaactgac caacaaacac tacgtactat    1080
gatgtcaatc ttttttagag acattctcat tactaaaatg agtggatact tgaatgttta    1140
actcctaaaa taatgagcgg tgaataaatg agcaagtaca tgcatgcctt ccaatgtaga    1200
gtcattttca ttaaaccctc tctcaccaga gaagcagtgg tatgaaattg gcctgattcc    1260
tttctaagtg tgttgttctt gttcacagtt ggacatgata taggtcgtgg atgtatgggg    1320
aatctaagag agctgccatc gctgtgatgc tgggagttct aacaaaaca gttggatgcg    1380
gccattcaag gggagccaaa atctcaagaa attcccagca ggttacctgg aggcggatca    1440
tctaattctc tgtggaatga atacacacat atatattaca agggataatt tagaccccat    1500
acaagtttat aaagagtcat tgttaaaaaa aaaaaaaaaa aaa                      1543
```

<210> 287
<211> 954
<212> DNA
<213> Homo sapiens

<400> 287
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gaattcggca cgagcccaca ccaaacctgt ggacgccgac ccgggaccgc cgctggctgg      60
ctgctggctc actcgaccgt catggagacc ctggggggccc ttctggtgct ggagtttctg     120
ctcctctccc cggtggaggc ccagcaggcc acggagcatc gcctgaagc gtggctggtg     180
ggcctggctg cggtagtcgg cttcctgttc atcgtctatt tggtcttgct ggccaaccgc     240
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cctggacttg aagcccgtga aatgactcca tctgggattc agatacagt gttctcaagt     600
gaagaaggct tggaacccac cccacctccc tcattggggg ctctctgggc aaacatggtt     660
ttcatgcacc cctcttcctg agcttggtcc ctgcctggtg attcttctta tactcggaga     720
gcatccctgg ttgaggagac acccgcaatc ctccacgatc tcatggctcc acctgcttct     780
ccccactgcc tgatttcttt tctctctgcc tgatgtctac tgaacagaac ttcccctctc     840
ccatgcaccc actgccagct gagagctgct tcccaatggc ctgcattaaa gcattcgtaa     900
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<210> 288
<211> 2784
<212> DNA
<213> Homo sapiens

<400> 288
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catgggaggt gttgtgcagg cttccctcag cattcacggc atgtgtggag gaccaatgct    240
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tcttcttact ggaatcacct tgtcattttg ggtggccatt ggggccttca tttaccctgc    360
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agtttgtaat ttattttgct tttggtctaa gaagtacaaa acactatgct ggtgtggagt    660
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tggaaacatt ttttaaagtc tggcaacgct aattaagctg ttgatctaag gatttgcaaa   2580
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tctgtgaata ttgaaatctg agccaaaact agttagcttt attaatatct tagggaaaga   2700
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agaaagaaaa aaaaaaaaa aaaa                                           2784


<210> 289
<211> 943
<212> DNA
<213> Homo sapiens

<400> 289
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atataattca tgtaccaggt gattcacccc tttaaagtct caaattcagt ggttttagt    120
atatttccag aattgtgcag ttatcactag gagcaatttt agaatgtttt catcacccgg    180
aaagaaactc tatatccata cgcagcctct ccccatttctccccaaccccc agccctagg    240
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221

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caaccactca tctgctttcc gtgtctgtag gattgcttgt tctggaaatg ttgtatacat      300
ggaatcatgc actgtgaact cttgtgtgtc acagaaggat catgtttcca tggtgcgtct      360
gtgtcatagc atgtatcagt gcagtaaccc cccttatcca aggtttttact ttctgcagtt     420
tcagttaccc acagtacagt acagtaagat attttgagag agagaccaca ctcacattac      480
ttttattgta atatatcgtt ataattgttc tatttgatta ttgttgttaa tctcttactg      540
tgccttattt agaagttaga ctttgtcata agtatgtatg tataggagaa aagatagtat      600
atataaggtt tggtgctatc cacagtttcg gacaccct gggggtcttg gaatgtawcc        660
tgtggataag cgggaccact gtacttcatt ccttttttatt gtcaaataat attycatkgk     720
gtggctawgc catawtttgc cyattcattc gtcagttggt agacatttga ggtgtttcca      780
twtttttggct tttgtgaaga atcctaggcc gggcacagtg gctcatactc ctgggacctt     840
gggaggccaa gacgggacga tcacttgagc tcaggaattt aagaccagcc tgggcaacat      900
agtgagactc tgtctctaca aaaaaaaaaa aaaaaactc gag                         943
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<210> 290
<211> 887
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (303)..(303)
<223> n equals a,t,g, or c

<400> 290
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ggtctgggta gtggttactt gtgtgtattc actttatgct aactcattga actgtacaga      120
tatggactgt gcccctttct atatgtgtgt aatgcttcaa caaaagtgtc aatagtgatg      180
catgcacatg ttaaaatttc aaactatatt aaagagtgtg caattaaaag gaagttatcc      240
tctcactcta aagtcctatt tcctctcttc agtctatcat tactactagt ttctagtata      300
tcntttagaa atgkgctgta aaagaacaat gatgtgtatg tctctacagg tatatatttta     360
ttcttttttgt aattacaaaa atataaactc actacatatg ttattctacc acatgctttt     420
tttcatgtaa cagtatgtct tagacatctt ttcctattat tgcgtggaag ctatcaacct      480
tattctttgt aatgactcca taaattattc tactgtgaaa acacaccatg tttaaccagt      540
tctctgttag tgaacattta ggatttttcc agttttttaaa tattacagtg acatatttaa     600
cattaaacat atctttttgac acatgtcctt gcacacatgt ataggtatga tggactttaa     660
caccctttgg ctagattctt tagcacataa cgtaaatatc ccatagagtc aaaaccaccc      720
ttaaaacttc ctcaggaggc tgggtgtggt ggctcacgcc cgtaatccca gcactttagg      780
aggccgaggt gggcggatca cgaggtcagg agatcgagac catcctggcc aacatggtga      840
aaccctgtct ctactaaaaa tacaaaaaaa aaaaaaaaa actcgta                     887
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<210> 291
<211> 1478
<212> DNA
<213> Homo sapiens

<400> 291
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ggtgctccct ggacgcacgg gcggcggagc aacgttcgcg tcatcacgga cgagaactgg      180
agagaactgc tggaaggaga ctggatgata gaattttatg ccccgtggtg ccctgcttgt      240
caaaatcttc aaccggaatg ggaaagtttt gctgaatggg gagaagatct tgaggttaat      300
attgcgaaag tagatgtcac agagcagcca ggactgagtg gacggtttat cataactgct      360
cttcctacta tttatcattg taaagatggt gaatttaggc gctatcaggg tccaaggact      420
aagaaggact tcataaactt tataagtgat aaagagtgga agagtattga gccgtttca      480
tcatggtttg gtccaggttc tgttctgatg agtagtatgt cagcactctt tcagctatct      540
atgtggatca ggacttgcca taactacttt attgaagacc ttggattgcc agtgtgggga      600
tcatatactg tttttgcttt agcaactctg ttttccggac tgttattagg actctgtatg      660
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atatttgtgg cagattgcct ttgtccttca aaaaggcgca gaccacagcc gtacccatac      720
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gaggcggatg aagaagatgt ttcagaagaa gaagctgaaa gtaaagaagg aacaaacaaa      840
gactttccac agaatgccat aagacaacgc tctctgggtc catcatggc cacagataaa       900
tcctagttaa attttatagt tatcttaata ttatgatttt gataaaaaca gaagattgat      960
cattttgttt ggtttgaagt gaactgtgac tttttttgaat attgcagggt tcagtctaga   1020
ttgtcattaa attgaagagt ctacattcag aacataaaag cactaggtat acaagtttga   1080
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caagcaataa gatttatgta tatttgttta ataataacct atttcaagtc tgagttttga   1200
aaatttacat ttcccaagta ttgcattatt gaggtattta agaagattat tttagagaaa   1260
aatatttctc atttgatata attttttctct gtttcactgtgtgaaaaaaa gaagatattt   1320
cccataaatg ggaagtttgc ccattgtctc aagaaatgtg tatttcagtg acaatttcgt   1380
ggtctttta gaggtatatt ccaaaatttc cttgtatttt taggttatgc aactaataaa   1440
aactacctta cattaattaa aaaaaaaaaa aaaaaaa                             1478


<210> 292
<211> 1780
<212> DNA
<213> Homo sapiens


<400> 292
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ctataagtac tataattata taaatattaa tgaattcaga ttagctgaaa ggaaaaaaag      120
tagaagcctg actacttggt gctaactact aaagattttggcagaatcaa tgttggattt      180
ggctttcctg tcccttcccc atgccagccc cccagagtgt tctgccttgt gctgcctccc      240
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gtcaggtgat gtttgtgttt ttggttatgc ccatctccat agccagacca agcactctgg      420
aagccagggt tgggtgctta tttatctgtt tgccatgcag aaaatatctt gcacaaaatt      480
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aggaacccgg ctgtgggtgg ttctgagctg tttggcttca ttgacagttt ctgattgccc      660
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gatggctgga gtgggtattt gaaggtctttt ctgtcacctg ttcagtgtgg tctgccccac      840
ccctgctgac caagactgac tgaaatgtaa aataatacag accatctcaa ctcagaaagc      900
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ctttatgagt agaaattgtg agaaatattg tgccaggcaa tttgcaaaat cttggaaggt    1020
tgtgtgcact taaccaccca gcaactactc ctggatgcat cctagagaag tgccatgtga    1080
acagagaatg attttaagac ttcactgaag tattgtttag gtagcaagat tgggaaaagc    1140
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gaatatgaaa gagttacgtc tcaacacaga tagatgaaaa attatgctga gaaagttggt    1260
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cttcagttgt gttttctttg ttttttttcta aaaattgatg cagaggcatc acaatgttaa   1680
gattttaaca gggtagtgtg gtgggtactt tttaactgtt tgcttaaagt gtttcaaagt   1740
aaaaatattt cttaaaaaaa aaaaaaaaaa aaaaaaaaa                           1780


<210> 293
<211> 1984
<212> DNA
<213> Homo sapiens
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223

<220>
<221> misc_feature
<222> (598)..(598)
<223> n equals a,t,g, or c

<400> 293
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cgcctacgcg gtcacctaca cagcgatgta cgtgactctc gtgttccgcg tgaagggctc     180
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ccatggcggg agggagaccg catctgaaga ggagtttctc catcatcccc tgctttgnct     600
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ctgccagcgc ccaccccag ccagggcccc tcgccttcct cccctggacc tggggggcca     780
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cccttttcctg cccccctcctc atctttaata aagacctggc ttctcatctt taataaagac    1920
ctgtttgtaa cagaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1980
aaaa                                                              1984
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<210> 294
<211> 1222
<212> DNA
<213> Homo sapiens

<400> 294
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ggagacattc ctgattttcc tccttgtaat gatgagtgcc atcacagtgg cccttctcag     240
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cacccagcat tccacagcca cccagagctc cacagccact caaacttctc cagtgccttt     420
aaccccagag tctcctctat ttcagaactt cagtggctac catattggtg ttggacgagc     480
tgactgcaca ggacaagtag cagatatcaa tttgatgggc tatggcaaat ccggccagaa     540
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224

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gtccaatcga acagtgtttg tcagcatcga cataggcatg gtatcccaaa ggctcaggct      660
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cctgagtggc actcacactc attcaggtcc tgcaggatat ttccagtata ccgtgtttgt      780
aattgccagt gaaggattta gcaatcaaac ttttcagcac atggtcactg gtatcttgaa      840
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aaaaaaaaaa aaaaaaaagg gc                                             1222


<210> 295
<211> 1815
<212> DNA
<213> Homo sapiens

<400> 295
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ggtcaaaact tttgatcttt gcttgcagtt tttgtttttt tctcttttac actctccctg      180
ttccctgatt aaatgaaggc caggcttgcc tagttccagg gaaaaggcc agggtgccta       240
gagcaaggtg gatgggactt tgttcgcaga tgggccttga gagagcgacc cctcgctcct      300
aaatgcccgg aggaagggac ggacttcttt atctttacca tgggtattct gccttactgc      360
tttggcctgt ggcgtttctt cacttgcttt tcctcatttt gcttggaatg tgctttgcct      420
gttgcatacc cacctcgttc gcccccttgc acactccatg gctggcctaa aagcccagtc      480
tgctgtcctg tgccctttag acttccactg taggattatg tttccacact ccctgtggac      540
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gggctgtgct ggatttgtgc acgatgcttt ggacagccca tgggagaggg ccaggaggaa      780
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aaaaaaaaaa aaaaa                                                     1815


<210> 296
<211> 1346
<212> DNA
<213> Homo sapiens

<400> 296
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<210> 297
<211> 1262
<212> DNA
<213> Homo sapiens

<400> 297
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accctagaag aatgattgga cagatgtgag ccatctggag cagagggggca ctaacccagg   180
ctgacgccaa gaatgaagtg gcccactgca gccctggcga gcaggcttct tggatggaca    240
gtgctgagac ccccatatcc cagagtcccc agcctccctc aggttactct gcaccccaca    300
gatggtttga tggctgtgct gtatactgga ggggagggca ggactctggg agaacagcac    360
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cg                                                                  1262
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<210> 298
<211> 989
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> (955)..(955)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (979)..(979)
<223> n equals a,t,g, or c

<400> 298
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gcagtgctga ggacgctgag ggacacccg atgatggtcc acacaggccc ctgctgctgc        180
tgctgcccct gctgtccacg gctgctgctc accaggaaga agcttcagct gctgatgttg        240
ggcccttccc aatacgcctt cttgaagata acgctgaccc tggtgggcct gtttctcatc        300
cccgacggca tctatgaccc agcagacatt tctgagggga gcacagctct atggatcaac        360
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aaggttgggt atgaaacttt ctcttctcca gacctggact tgaactcaaa gcctaaggtg        720
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<210> 299
<211> 632
<212> DNA
<213> Homo sapiens

<400> 299
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ggctgcctct accgcctgcg ggcgctgggc gagcggcaca ccatggacct cactgtggag        180
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cacttctggc agctttttaa cgcgctgacg ttgttcaacc tggccccagga ccctcagtgc        300
aaggagtggc aggtgctat gtgcggcttt cccttcctcc tccttttcct cggcaatttc        360
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gattgaggct gggccttccc ctgccggccc agagggcttt ctgtcctgtg tgttgtggga        480
ggggatggga ggcgcccctc gagtgtgcgt gtatcagggg gtctcttcta ttctcccttg        540
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aggcccagag gtggaaaaaa aaaaaaaaa aa        632

<210> 300
<211> 2572
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2527)..(2527)
<223> n equals a,t,g, or c

<400> 300
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tttgcttcac agtcacctgg aatgccggga gccctgctc atcccgatcc tctccttgta   120
catgggcgca cttgtgcgct gcaccaccct gtgcctgggc actacaaga acattcacga    180
catcatccct gacagaagtg gcccggagct ggggggagat gcaacaataa gaaagatgct   240
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caacctcttt gtttcccggg accttggtgg cagttctgca gccacagagg cagtggcgat   360
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tgtttcgtga tgttttggac acccaacgtg tctgagaaa tcttgataga catcatcgga   600
gtggactttg cctttgcaga actctgtgtt gttcctttgc ggatcttctc cttcttccca   660
gttccagtca cagtgagggc gcatctcacc gggtggctga tgacactgaa gaaaaccttc   720
gtccttgccc ccagctctgt gctgcggatc atcgtcctca tcgccagcct cgtggtccta   780
ccctacctgg gggtgcacgg tgcgaccctg ggcgtgggct ccctcctggc gggctttgtg   840
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agcagtttta taaagtccgt catttgcatt tgaatgtaag gctcagtaaa tgacagaact  2520
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<210> 301
<211> 1488
<212> DNA
<213> Homo sapiens

<400> 301
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ttctggtggc tgcagtggtg gggttggtgg ctgtcctgct ctacgcctcc atccacaaga   180
ttgaggaggg ccatctggct gtgtactaca ggggaggagc ttttataact agccccagtg   240
gaccaggcta tcatatcatg ttgcctttca ttactacgtt cagatctgtg cagacaacac   300
tacaaactga tgaagttaaa aatgtgcctt gtggaacaag tggtgggtc atgatctata   360

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agttctgcag tgcccacaca cttcaggaag tttacattga attgtttgat caaatagatg    540
aaaacctgaa gcaagctctg cagaaagact taaacctcat ggccccaggt ctcactatac    600
aggctgtgcg tgttacaaaa cccaaaatcc cagaagcca aagaagaaat tttgagttaa    660
tggaggctga gaagacaaaa ctccttatag ctgcacagaa acaaaaggtt gtggaaaaag    720
aagctgagac agagaggaaa aaggcagtta tagaagcaga gaagattgca caagtggcaa    780
aaattcggtt tcagcagaaa gtgatggaaa aagaaactga aaagcgcatt tctgaaatcg    840
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<210> 302
<211> 609
<212> DNA
<213> Homo sapiens

<400> 302
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aacactggcc ctcagagcag gacccagaga aggcctgggg cgcccgtgtg gtggagcctc    180
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gctccagggg ccatcactgc ccccgccctg tcccaaggcc caggctgttg ggactggga    540
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aaaaaaaaa                                                          609
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<210> 303
<211> 612
<212> DNA
<213> Homo sapiens

<400> 303
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gaaattcccc gtggcattag aggtgtttcg taaggtgctc cctgctgtct gtcctacaga    180
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tgccagcagt ggacagaaca ggggcagagg tgatcagtga ccattgcaca gaatatcagt    360
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tccttagaag gagaattgct tgaacccgga aggtggcggt tgcagtgagc caagatggcg    540
ctactgcact ccagcctggg caataggaat gaaactccgt caccaaaaaa aaaaaaaaa    600
aagggcggcc gc                                                       612
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<210> 304
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229

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<211> 613
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (25)..(25)
<223> n equals a,t,g, or c

<400> 304
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gttgcagcac tcccagtaga ccaggagctc cgggaggcag ggccggcccc acgtcctctg     120
cgcaccaccc tgagttggat cctctgtgcg ccacccctga gttggatcca gggctagctg     180
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ccagtacgac ctctgcaacg gcaccggcct tgccaccccg gccaccctgg ccctggcccc     540
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acaaagctct cga                                                        613

<210> 305
<211> 1015
<212> DNA
<213> Homo sapiens

<400> 305
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taagtgtgct gctatgcagg gtgagtgaat tactcaataa ctaaataatt gtgacataat     180
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gtatgtgcta attggtttgt gagtatgcaa aaaaagctaa aaaaaaaaa aaaaa          1015

<210> 306
<211> 1022
<212> DNA
<213> Homo sapiens

<400> 306
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acacactgat gctcaaatcc taaggtgcca agctctaggc cctggaggct ggtagaacag     180
gatctatgcc tggaatcctg gcagggattc ctgtcaagga cttgtgttta agcctgcttc     240
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gctgttatca cttcccttgt aggaacatag ccagaagcag atgagccagg gtagagggct      420
ggcccctcct ctcatcttcc cttcagtctt aaattgtctc cagcgatggg aagaggccag      480
ggactgtaac ccttgtgctg tgtattctct gagcctctgc tcactctcag ggccaagcag      540
ctcccaagcc ggggccctct cttggccaaa atctgaggag cagtctaggt tacaggcttt      600
ttggtaggta ggttctggct gcctgttaat gcagttaggc cccctgatta ggtacagtga      660
gaaacaagct agaacaaccc tggcccagaa gactgtgcac tccagcaaga tccagggatg      720
atagccttgc agggccactg ggagtttgtg cccaagcttc tccctcttct ctccccaggg      7B
ggcactggga ctggtccctg ccctcatcct tagcctgggc cttccccaga ggtattaaag      840
agaagtatga ttcctctgtc ttcagttctt ttcaggggca tcctgcccat agtacccagt      900
tcccaagggg ccccccagtca cgtggtgaag cctagcactc atgcagctct tagggaacca      960
aaaaccagca ctgaaataaa gctgaatgac tgactgaaaa aaaaaaaaaa aaagggcggc     1020
cg                                                                      1022
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<210> 307
<211> 1766
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)..(14)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (36)..(36)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1750)..(1750)
<223> n equals a,t,g, or c

<400> 307
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tgtttatgga gggtccagta agtgcaaaca accattgcct ggtcctaagg gttcagagtc      120
cccgaattcc ttcttggacc aggaaagccg gagacgaaga ttcaccattg cagactcgga      180
tcagttgcct gggtactcgg tggaaaccaa cattctgccc acaaaaatga gagagaaaac      240
accatcttat ggcaagccac ggcctttgtc catgcctgct gatgggaact ggtggggat      300
tgtggaccct tttgccagac ctcgaggtca tggcaggaaa ggggaggatg ccctttgccg      360
gtatttcagt aacgagcgga ttcctccgat cattgaagag agctcctctc ccccataccg      420
gttctccaga cccacgaccg agcggcatct ggtccggggt gcggactaca tccgaggaag      480
caggtgctac atcaactcag atctccacag cagcgccacg attccattcc aggaggaagg      540
gaccaaaaag aaatctggct cctcagctac gagtcctcgt ccacagaacc gtccctcctg      600
gtcagctggt ttacgcgcct caaactgttg actcactgag agggaccctg ctcaggccac      660
ctgcctggct cctgscccaa gtgccttgct tttacagtgg acagccttt ctcgtttcag      720
cctcagtatt atgtagggac cttatgcaat ttcttttttct tttgaaagt tatctactgc      780
ccttcttgga agtttgcagg attggatggg aacaaattca gaggatctta ggtgctggct      840
tgtggagaca aaaggaggga aatgggtaga gcctgtttgt cttgcttccc cagagataga      900
atgtgaagac acgcgctaga aatcgcagtc ctggccagag acgttatggt cattgtgagg      960
gactggtggc attgttcctt tttgaggggc tggggggact caaattggtg gctgtttca     1020
cacagatgtg ttggtttgtg gtccaacttc tttatctgaa aaagccagtg agaaaacatt     1080
tttgatttga tttttctaaa ctatctacca tattttaagt gagcagctt tgactttgca     1140
ataacgtggc aagtatctga tttctccttt gaggcagagg tttaagtgta ggcctgttac     1200
acttgtttga tacctttttc atgacagtct cagtatagat cagttggtac agaaatacat     1260
gaacacattt tgatagggct tatttcacac aaagaagttt atggttattt gtgtggggtg     1320
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```
gtgttgttat atattattgt ctttaaggga aaagaagcta taagattcgc tgacagccaa    1380
agtatcattt agaaaagtga agcaacaaga tttaggttga tgaaagatac atgagtttgc    1440
attttgacct gttcagtgtc tgtcttccag cacggtgtgt acacttcttc aaaattgtac    1500
acagtttgct aattagaaat atcttggaaa gcctcaggt cactaatttt caactagcat    1560
caggtatttt gaaaacgtgt gtctggatat taactcttgt ttaaactgaa tgtatgatat    1620
tttgttagaa tggaaaagta ctatcttgtt aatttaagta ttttaaatat agttgtatat    1680
ttttcttaaa aaaaaaaaaa aaaaaaaaaa aaagggcggc cgctctagag gatcccgcga    1740
ggggccccan attacgcgtg agcgtt                                        1766
```

<210> 308
<211> 815
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (406)..(406)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (794)..(794)
<223> n equals a,t,g, or c

<400> 308
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tktaaawtac acagaggaaa mtattgtgga aggacctctt tgttgctttc ccttctaagt    120
tgtcttcttc ttcttcttct cttcttcttt ggtccttaag tgaaataaag               180
actctaaaac taatttgtat attatcagcc agagatgcgg atggcagtcg agccaaatcg    240
catggctttc agatcaggta ttctgcacat tcattccaag gtcatagatt tttaaaagga    300
cctggatttg aagagatggc aaatgrtgag ccatcagaaa acttaatttg gaaaacatgt    360
atgtagccag tgtggatatt gtggctctc tcaagacaca ttgacnactg tagacytcat    420
tcagtccagt gtgagtattt tggagtaggt tggatgtaga ttttgttttt atcgttgatt    480
tgtaccgaca gaaatagaca tttcatcatg taaaattcct gttattctgg aaaaacctat    540
tgttttgatc cttcttgttt tcctgacttg gaagtatcct ttcaaaaaaa ctcttagat    600
atctaggtct aaaaagcact tcatgagatg ctaaagctga cccactggtt gaaaatgttg    660
accctatcct gttatttaaa tgtgaacatt tattgtacat tcagtgagtt atagtgttaa    720
tagtcttgtg ctatgcagca ggtgtaaaaa ttaataaata tattttttaa taaaaaaaaa    780
aaaaaaaaaa attnctgcgg tccgcaaggg aattc                               815
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<210> 309
<211> 633
<212> DNA
<213> Homo sapiens

<400> 309
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ggcagagtgt ctctcaatgg cttctttctt gaagggcatc acagccactg tacttatcaa     60
tgcctgtgta gccaacacag tagctcctct acattacaag gatatgatta ttcctaact    120
tgtcgatgat ctaggaaaag taaaaatcac taagtcagga tttctcactt ttatggacac    180
ttggagcaat ccactggagg aacacaatca ccaaagtctt gttccattgg aaaaggcgca    240
ggtgcccttc ttgtttattg ttggcatgga tgatcaaagc tggaagagtg aattctatgc    300
tcagatagcc tctgaaaggc tacaagctca tgggaaagaa agaccccaga taatctgtta    360
cccagaaact ggtcactgta ttgacccacc ttattttcct ccttctagag cttctgtgca    420
cgctgttttg ggtgaggcaa tattctatgg aggtgagcca aaggctcact caaaggcaca    480
ggtagatgcc tggcagcaaa ttcaaacttt cttccataaa catctcaatggtaaaaaatc    540
tgtcaagcac agcaaaatat aacattgtag ccacagacca gataccatta ataaaaatcc    600
tattcataaa aaaaaaaaaa aaaaaaactc gta                                 633
```

232

<210> 310
<211> 989
<212> DNA
<213> Homo sapiens

<400> 310
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cctgcctcag cggcccccat gggcggccca gaactggcac agcatgagga gctgaccctg   120
ctcttccacg ggaccctgca gctgggccag gccctcaacg gtgtgtacag gaccacggag   180
ggacggctga caaaggccag gaacagcctg ggtctctatg gccgcacaatagaactcctg   240
gggcaggagg tcagccgggg ccgggatgca gcccaggaac ttcgggcaag cctgttggag   300
actcagatgg aggaggatat tctgcagctg caggcagagg ccacagctga ggtgctgggg   360
gaggtggccc aggcacagaa ggtgctacgg gacagcgtgc agcggctaga agtccagctg   420
aggagcgcct ggctgggccc tgcctaccga gaatttgagg tcttaaaggc tcacgctgac   480
aagcagagcc acatcctatg ggccctcaca ggccacgtgc agcggcagag gcgggagatg   540
gtggcacagc agcatcggct gcgacagatc caggagaggt gagcctggca ggggtttggc   600
aggcagggca gttggatggg gggcgcacag ggcagctgga aagggcccc ctcacctggg   660
ctgagccaca tctccctccc cagactccac acagcggcgc tcccagcctg aatctgcctg   720
gatggaactg aggaccaatc atgctgcaag gaacacttcc acgccccgtg aggcccctgt   780
gcagggagga gctgcctgtt cactgggatc agccagggcg ccgggcccca cttctgagca   840
cagagcagag acagacgcag gcggggacaa aggcagagga tgtagcccca ttggggaggg   900
gtggaggaag gacatgtacc ctttcatgcc tacacacccc tcattaaagc agagtcgtgg   960
catctcaaaa aaaaaaaaaa aaaaaaaaa   989

<210> 311
<211> 1524
<212> DNA
<213> Homo sapiens

<400> 311
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cccctccacc tgtggatgaa gagccagagt cctctgaggt cgatgctgct ggtcggtggc   120
ctggtgtctg tgttagcaga acatctccaa cacccccaga gtcggcaacc accgttaagt   180
cacttatcaa gtcatttgac ttgggacgcc caggtggagc tggacagaat atttctgtcc   240
ataagacccc cagaagtccc ctaagtggga taccagtgag gactgctcca gcagctgctg   300
tctctccaat gcagaggcat tcgacttaca gcagtgtgcg gccagccagc agaggggtga   360
ctcaacgctt ggaccttcct gaccttcccc tctcagata tctaaaggga aggactgaga   420
ccctgaagcc agacccccac ctccgcaaga gtccctcact agagtcactg agcagacccc   480
cgtctctggg ctttggggac acaagactgc tgagtgcttc cacccgggca tggaaaccac   540
aaagcaaact cagtgtggaa agaaaagacc ctctggcggc cttggcccgg gaatacggtg   600
gttccaagcg caatgctcta ctgaaatggt gccagaagaa gacacaaggt tatgcgaaga   660
ggaatctctt gttggcattt gaagcggctg aaagtgtagg catcaaaccc agcctggaac   720
tcagcgagat gctgtacaca gaccggcccg actggcagag tgtgatgcag tacgtggccc   780
aaatctacaa gtactttgag acgtaaccct ggaggcctg gggcagccac cattgccacc   840
tactgcagct tttcctggaa gcgcctgatt actgtccact gaccctgctc tgcccaccac   900
ccagctgcct agacttcaaa gacaggctca atccaagtgg accaacaccc aaataagaaa   960
cagagtgggt cccacgatgt acctgtctga aatgcaaatg cagctggact gtaaattggg   1200
gactctttga tctcttgtgg gatgcttcta aagagggcag cctccctcct tccagaccaa   1080
gaccccacac ccaggcttgt tttgctgatt atattgggtg gctgaacgaa cacattatct   1140
gcagaaattc agacaaagaa catctccaaa tcagtctttt ggttgctgtt gttaaaaata   1200
tcccggcttt gcctttatga aacctttcgc cttggctggg tgtggtagct cgtggctgta   1260
atcccagcac tttaggaagc caaggcagta ggatcgtttg agcccaggag ttcgaggctg   1320
cagtgagcta tgagcatacc actgcactcc agcctgtgtg aaagagccag accctgtctc   1380
aaaaaaatga taaaacccaa aactttgccc ttgtgaaccc tcccttcccc cctccccac   1440
cccaaaaaaa aacaacaaaa cacaaaaaat aaacatttgt tccagggcaa cctggaaaaa   1500
aaaaaaaaaa aaaaaaaaaa aaaa   1524

233

<210> 312
<211> 770
<212> DNA
<213> Homo sapiens

<400> 312
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ttggctctat ttcatgctaa mccagttttt tttgtttgtt tgtttccact ttataacata   120
tggatttcta tgccacacta cccgtaactt tgaaaaataa ctttaggctg cagttttcag   180
caaacaggac agtccttagc tgccacatag ctcaacataa agtgcacaaa aaacttcagp   240
gtgggacagt gaatcataaa ttcccaaact gacgtgtgtc tacagaacag atgagaactg   300
ttactcagtg tgtatcttag gagcttttct gcagtttcct cacactccgt cacatttaaa   360
atgtggacac ttgtttattt cattagggag gaggcgaggg actaatgtcc accctgccca   420
gagtatttcg aatatcctta gtgaagagga ggaaagcaag aattctgttc taaaggccac   480
caggctaagc actagaatcg cattctcttc ctgtttgtat gtttatgtca gcagttgcca   540
cagatgtgtt aatattgttt tcctggtaga gaattaaggt gttcgttcat ctcaaaacaa   600
atcccgtaac ctgcacacaa aactccagct tcctaatgca aagagaagag aaattgatt   660
ataagctgct tgatattctt tttattccca gcccctcaaa ataccagcct ggaagtctgg   720
acattactaa aatttaccag tctcaaaaaa aaaaaaaaa aaaactcgag   770

<210> 313
<211> 843
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)..(2)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (19)..(19)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (87)..(87)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (89)..(89)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (525)..(525)
<223> n equals a,t,g, or c

<400> 313
cnagggataa ccccaaagnt gggaaataaa ccctcaatta aaggggggaac caaaaagctg   60
ggaagttccc ccccgcggtg gcggccngnt ctaggaacta gtggaatccc ccggggctgc   120
agggaattcg gcacggagtg ggaatgttgt ttgtatgata ctatttccac aawatgcatt   180
gagacttggt ktgtggccta ggacatggtc aattctttyt aaatattccg tgaatttctt   240
tagtgcatat tctccgatgg gggctgtggg gacagagttc taaatatgcc cattagatta   300

234

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aatctcttca ttctgttgct cacatcttct atatccttat taactgtca atctcttcaa      360
gagaggtgtt attaaaatct ctcactgtat gtgtcacttt gcccttaaaa ttctgatgat      420
ttgctttata aatggttata accattttcc aggaagaaca ttaaagaact ttccattggc      480
attatccagt ttccctcaaa atactggttt tttttatttt ggctnctaag cagctatgaa      540
tccagtttct cagaagccct tgtctcaagg catttgtttc cagattacct tgttagcatc      600
cacactatgg gctattttag aaaaacaaaa aaagtatcaa aatcatatag ctatgatttt      660
cctgtgcttg aaggagcctt aaagctcatc tagtccagcc agtatttgtt catccaaatt      720
ctgccaagaa atctctattg tcaagatatt ctttaccac tttgggacat tctcattatt      780
agaaacaaat cctaagaaga aattctgcca takacaaccc atccgttctt taaaaaaaaa      840
aaa                                                                   843
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<210> 314
<211> 617
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (513)..(513)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (559)..(559)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (587)..(587)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (602)..(602)
<223> n equals a,t,g, or c

<400> 314
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agagctcacc aatcagactg cccttgtcta tccatgagca gatgtttgat agtattgcgg      180
aggccctcta gtgggtatgc tgccaagcaa ctggagtggc acttgggctc taatccagtt      240
gtctatccct ttcaccctgg catttcatca gccaaacaaa aaccaactaa ctcagaaaaa      300
aaggaaagcc cctcaagggt ccttgaccc cgatatctac atagatgcta tcggggtccc      360
ctgagggta ccaaacraat tcaaagctcg aaatcaaata gctgctggat tcaagtctgt      420
ccttttcttg tggtctacta taaataaaaa tgtagactgg ataaattaca tatactataa      480
aaaaaaaaaa aaaaaaaaaa ctcgagggg ggnccggtac ccaattcggc cttagtgag      540
tcgtattaca atcatgggnc gtcgttttac aaagtcgtga ctggggnaaa acctggcgtt      600
anccaattta atcggct                                                     617
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<210> 315
<211> 1130
<212> DNA

<400> 315

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cataagaata aaatggttca caccaataca agtacttagt tgtggaaagg gagagtagaa   180
gataaaaatg gagattttcc tgtgctacag gcttagtcaa gcttatggtc tattaatgg    240
ttatcaaagg caattaaata gtgttgaatg ttctgctttt acctacattt cattttcat    300
gtacttagtt acaaattgaa ccctcttcta tttttttcct gctcctgttt ctgtttcatt   360
ttagttttcc ttttccctga ttatcattta ggcatgtaag tgacacccag tagcattgct   420
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tctcttgcta atttgcttga ctagataact aagaattcag gtaagcatta gctctttgtt   540
cactgagaat aatacaactt gcaagataat taatttggat tgttctacat gtatttcgtt   600
tatttctctt taccttgttc atttattacg acattttgaa ttatttaat acccatattt     660
cttctttctt ttatggctca gctcactatg cttttttta atactggtag cttcctcaag     720
gttggaaaac aagatctgaa tactatagaa aataataact attttctgt ggtcatatta     780
aagatataat ggctttggat tttggggtga tttttctact gtcagtttaa aaaaacttg     840
tctatttgca tttgtgtgtt attacttcta gttaagagta tttccaagga aagtttcatg    900
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atcagtggaa aagtaggttt cgttatatag aaattaactt taggctgggt gcagtggctc   1020
aagcctatat ttgggaggcc gaggcaggag gattgcttga atcaggagt tcgaaactag    1080
cgtgggcaat gtagcgagac ctggtctcta caaaaaaaaa aaaaaaaaa                1130
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<400> 316

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ctacttctca cagggcctgt cagttcagct gtttaatgat gggtccaagg gcaaactcaa    180
tcatttatgt ggagctgact ttgtgaaaag tcatcagaa cctccacagg gaatggaaat     240
taagtccaat gaaagatgct gttcttttga tggagatgca gacagaattg tttattacta    300
ccatgatgca gatggccact ttcatctcat agatggagac aagatagcaa cgttaattag    360
cagtttcctt aaagagctcc tggtggagat tggagaaagt ttgaatattg gtgttgtaca    420
aactgcatat gcaaatggaa gttcaacacg gtatcttgaa gaagttatga aggtacctgt    480
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agtttatttt gaagcaaatg ggcatggcac tgcactgttt agtacagctg ttgaaatgaa    600
gataaaacaa tcagcagaac aactggaaga tagaaaaga aaagctgcta agatgcttga    660
aaacattatt gacttgttta accaggcagc tggtgatgct atttctgaca tgctggtgat    720
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tatatgcaga agcagactca caagaaagtg cagatcacct tgcacatgaa gtgagcttgg   1020
cagtatttca gctggctgga ggaattgag aaaggcccca accaggtttc tgaagataat   1080
tttcatattc ctgagaaact ggactttta caagtcttta caaaactgtc aataataatg   1140
gcagtactaa gagatttata atcataatgt ttacaatgca gcctactgga ttgtctctag   1200
atctgttttt cttaaacact aacagaataa ttctttataa ataggtaagc cttacactg    1260
ttaaagaaat ttacctctaa tttcagtctc actaatgtaa aatactggga cttaagtata   1320
caattcagtc actaactgta cagtttatg tggggaacaa ttcatgcagg ctactggaaa    1380
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attaaatctt attaccaact ccttgtgata tctttgccat caccatcaca tgagcaagat    1440
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aaccagtttt tccattgcag agtcttaaga aagattatta gatgacttac ctatatgact    1560
aatgccatca ggaactcaga ggtatgaata gggggttgtc catccctctt ccatactgag    1620
gtggagatgc tcatgcaata cttttaagga tgcatggtcc agccttcagt tatcttcac     1680
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aaccaatctt aattgaacca agtctgaaac caatggaaaa aaaaaatggg tagtgtatat    1860
tttgcaggtt taagacaact caggacaata aaaacaatgg actttacatg tgtatatata    1920
tagctctctt aggcaccata atcagtatga gccaacaata tttaaacttg attcaggcca    1980
cattcagaca tttgctctta tatacaaata tttaaattaa atacaatctg aaatgtgttc    2040
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tacatttaca tgtaagctaa atggaaccag caatggtgct caagttttta tcatcccttc    2160
cagaaaatct ttttctacca tctcttctat ttttgcctg gctttgctgg aacatggttt     2220
gtggttctcc agtttcatgt ccttattagg gaaggcattt gagtagagga taggactccc    2280
tgagtgtcct ccacatcggc ttgtgacttt gctgttgaag acttgactga gcacattgaa    2340
gaacggcagg agctgctcca tactgcgcac ggtgcagatg gtgagcagca agtgccctgg    2400
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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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cgccccgagg cggtagcttc agagcctcca gtgcctgtgg ggctggaggt gaagttgggg    180
gccctggtgc tgctgctggt gctcaccctc ctctgcagcc tggtgcccat ctgtgtgctg    240
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237

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<212>  DNA
<213>  Homo sapiens

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<210>  319
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<212>  DNA
<213>  Homo sapiens

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238

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<223> n equals a,t,g, or c

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gcagttggaa ttgatcacac cttttcagtt gtacttcaat cctgaattaa tctttaaaa   180
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<211> 1618
<212> DNA
<213> Homo sapiens

<400> 320
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aaccagaaag aggctgtcat cctgtacgcg cagcccagcg agcgcagcat catgcagagc   720
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239

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<211> 1338
<212> DNA
<213> Homo sapiens

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aagtttgcag tggccctgct agatgacta gtccgtgtgt ataatgccag cagcaccata   180
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accagtcatc ctccttttc gcactcgaaa cagccctgtg tttgagctcc ttccctgtgg   960
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tttgtcaatg cccagtttcc acgttttagc ccagtgcttg ggcgggccca ggaacccct   1140
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gccccttggg accctctccc agggccacca cctgttctgc cccactcccc acattcccac   1260
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<211> 1892
<212> DNA
<213> Homo sapiens

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tgctattcga tcgtggagaa tacctgcatc ataaccccca gccaaggc ctggaagtac   1080
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<210> 323
<211> 813
<212> DNA
<213> Homo sapiens

<400> 323
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<210> 324
<211> 1038
<212> DNA
<213> Homo sapiens

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241

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<210> 325
<211> 2383
<212> DNA
<213> Homo sapiens

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<222> (538)..(538)
<223> n equals a,t,g, or c

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ctggtcttcc caagctccac tggcagccac ttctccatgt tgggcatcgg agacatcgtt     840
atgcctggtc tcctactatg ctttgtcctt cgctatgaca actacaaaaa gcaagccagt     900
ggggactcct gtggggcccc tggacctgcc aacatctccg ggcgcatgca gaaggtctcc     960
tactttcact gcaccctcat cggatacttt gtaggcctgc tcactgctac tgtggcgtct    1020
cgcattcacc gggccgccca gcccgccctt ctctatttgg tgccatttac tttattgcca    1080
ctcctcacga tggcctattt aaagggcgac ctccggcgga tgtggtctga gcctttccac    1140
tccaagtcca gcagctcccg attcctggaa gtatgatgga tcacgtggaa agtgaccaga    1200
tggccgtcat agtccttttc tctcaactca tggtttgttt cctcttagag ctggcctggt    1260
actcagaaat gtacctgtgt ttaaggaact gccgtgtgac tggatttggc atttaaaggg    1320
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tgtgttggca gtgaacaagg gcacggtttt tatacatacg tacatatata tatataaaca    1860
cacacataga tatatatgaa taaacaaaaa tgaaatcctg ctaagatcacgctgtgtagc    1920
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tggataagct gctgtccttc cccttcacaa ctgaccccgc agttacaaac tagtatagca    2040
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gtagcaaatt agggatgaag agttcaaacc ttttggccct ttctttcttt tctaggcttc    2160
tccctcgcag ggtgttccgt agtttcttct cgagccaatg catgtattat agcagcaggt    2220
gtctttgtgc tttctcatca tagtaacgta ctacttgtaa atacattttt ctattttcta    2280
ttttttttgta tttttttttg acattttgtt tcattggtgt ctgatatt ttccatgccc    2340
tcactccttt aagaaaaaaa aaaaaaaagg aaaaaagcaa cac                      2383


<210> 326
<211> 2081
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242

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (538)..(538)
<223> n equals a,t,g, or c

<400> 326
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gggttctcaa tggaaaaata ttggtagaca tcagcaacaa cctcaaaatc aatcaatatc     60
cagaatctaa tgcagagtac cttgctcatt tggtgccagg agcccacgtg gtaaaagcat    120
ttaacaccat ctcagcctgg gctctccagt caggagcact ggatgcaagt cggcaggtgt    180
ttgtgtgtgg aaatgacagc aaagccaagc aaagagtgat gatattgtt cgtaatcttg     240
gacttactcc aatggatcaa ggatcactca tggcagccaa agaaattgaa aagtaccccc    300
tgcagctatt tccaatgtgg aggttcccct tctatttgtc tgctgtgctg tgtgtcttct    360
tgttttttcta ttgtgttata agagacgtaa tctaccctta tgtttatgaa aagaaagata   420
atacatttcg tatggctatt tccattccaa atcgtatctt tccaataaca gcacttacac    480
tgcttgcttt ggtttactcc ctggtgttat tgctgccatt ctacaactgt accgaggnca    540
caaaataccg tcgattccca gactggcttg accactggat gctttgccga aagcagcttg    600
gcttggtagc tctgggattt gccttccttc awgtccctm cmcacttgtg attcctattc      660
gatattatgt acgatgraga ttgggaaact taaccgttac ccagscaata ctcaagaagg    720
agaatccatt tagcacytcy tcagcctggc tcagtgattc atatgtggct ttgggaatac    780
ttgggttttt tctgtttgta ctcttgggaa tcacttcttt gccatctgtt agcaatgcag    840
tcaactggag agagttccga tttgtccagt ccaaactggg ttatttgacc ctgatcttgt     900
gtacagccca caccctggtg tacggtggga agagattcct cagcccttca aatctcagat    960
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agtttgtcct aatcatgcca tgtgtagaca acacccttac aaggatccgc agggctggga   1080
aggaactca aaacactaga aaaagcattg aatggaaat caatatttaa aacaaagttc      1140
aatttagctg gatttctgaa ctatggtttt gaatgtttaa agaagaatga tgggtacagt   1200
taggaaagtt tttttcttac accgtgactg agggaaacat tgcttgtctt tgagaaattg   1260
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cctgactctt attttcccag aggccatgga gctgagattg agactagcct tgtggtttca   1380
cactaaagag tttccttgtt atgggcaaca tgcatgacct aatgtcttgc aaaatccaat   1440
agaagtattg cagcttcctt ctctgctca agggctgagt taagtgaaag gaaaaacagc    1500
acaatggtga ccactgataa aggctttatt aggtatatct gaggaagtgg gtcacatgaa   1560
atgtaaaaag ggaatgaggt ttttgttgtt ttttggaagt aaaggcaaac ataaatatta   1620
ccatgatgaa ttctagtgaa atgacccctt gactttgctt ttcttaatac agatattac    1680
tgagaggaac tatttttata acacaagaaa aatttacaat tgattaaaag tatccatgtc   1740
ttggatacat acgtatctat agagctggca tgtaattctt cctctataaa gaataggtat   1800
aggaaagact gaataaaaat ggagggatat cccccttggat ttcacttgca ttgtgcaata  1860
agcaaagaag ggttgataaa agttcttgat caaaaagttc aaagaaacca gaattttaga   1920
cagcaagcta aataaatatt gtaaaattgc actatattag gttaagtatt atttaggtat   1980
tataatatgc tttgtaaatt ttatattcca aatattgctc aatattttc atctattaaa    2040
ttaatttcta gtgtaaaaaa aaaaaaaaaa agggcggccg c                       2081
```

<210> 327
<211> 646
<212> DNA
<213> Homo sapiens

<400> 327
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tcgacccacg cgtccgataa ctttttcaag caatatcagt gagtgggtcc catcgacagg     60
gttccaggac ctggaacact ttaacagaag gaaatgccga agcagcttgc acagttgctt    120
tacagacttc caagaggctg attctggctt caagatggag ccttggagtt ggtttttttt    180
tttttttttt ttcttccctc aaagaacctg cggttgcgct ttgtgtgttt tgtttttgtt    240
ttccatttgg gggccccatg ggaaagagct tctgaactct ttcctttatg aactcccact    300
gtgttcctat aaaggccctt ttctttctta gtgttgtaag ttacattttcattatgcccc     360
```

```
atcacatctt ctttactgta aaaatattaa aaagctgttt ccaagtggga cagctaatga    420
agctctaatt attgcagaca tatttttgag atgtaaaaaa aaaaatttaa agttaaatga    480
taagtcttag aggcgagtga ggaataaaat ggatgtaaac atttacatgg gatgcattag    540
aattctgctg tgtgtactgt cttttggttg aaacaaatta tgaacagtga ctaataataa    600
aaagtcaata cccaawraaa aaaaaaaaaa aaaaaaaagg gcggcc                   646
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<210> 328
<211> 312
<212> DNA
<213> Homo sapiens

<400> 328
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aattcccggg tcgacccacg cgtccgtgat gagtggattt gtactcttacccaggtcctg    60
agggccagcc cacccagcat ccccacccct gatgacgctg tccctacaac tggctgaact    120
ggtgcatttt gtgtgtgcct tccagagcca gtggactggt gtgtatccaa tgatgccacc    180
tctgaaacct acagaaccac tatgctttgc atgtgtaccc tgcagggtct gagggccagg    240
ctgtctggta gctctgctcc tgggtgacag agcaagactc tgtctcaaaa aaaaaaaaa    300
agggcggccg ct                                                       312
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<210> 329
<211> 826
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (726)..(726)
<223> n equals a,t,g, or c

<400> 329
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ggtcgaccca cgcgtccggc tccctttgtt ttggtggcag ccttcttgtg ctgtatactt    60
gttccctagg gtgtataata atatgtgcac tagagtgcta ggtaccctac cacattgctg    120
ggaccttgcc acactgctgc agccttccag taggatatgg gggaatgtca gtgaggctcc    180
aggatgtag atatgtaggg aatgttggac cccagggcaa catgcaatct ggtaggagtt    240
gggctctcaa aatggtgctg ctgtgtaaca gctgcttggg tcttggggta gggagtgtag    300
gacccagcat gagctccctc tttggagcag tgctgtctga gactccaggc agctccgtgt    360
attagtctca ggacctgcaa aggcctaggg gctctttttg gtaggactg caggagtctc    420
catggtggga atgtgaacca ctggaaatct ctcatttacc atttccctgt actggagatg    480
ctttctgggc tcccagatga tactarctgg gctggttgcc tcamttcctt ctccctctgt    540
gcataaggca ttttctgtca cttctctgct gaactctagt gttctttctt agaggctgta    600
ctcaaagttt cattatccat tcagtatttt tattcttctt tgtggaggtg caagtgcta    660
ggtgcctcta gtcaatcatc ttgaagcccc ctgttatgtt aaagtcttta atggaaaaag    720
aagacnacat gcatgaccag gcagatactt tgagcagagt cataggaact gctaaaaaaa    780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagg gcggcc                   826
```

<210> 330
<211> 770
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (770)..(770)
<223> n equals a,t,g, or c

<400> 330
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atgtgctggg ctcaggaaaa gttcaaccca tcaataggtt atcacatata tatactctgg    60
```

244

```
gactgattgg accacatttt ctcactgaat tgactgattg atgaattcag ttggcagaat    120
taactcttct atgtctacat gaagtgccat ttagaaataa tcaactctta atcagcctgg    180
gatagtcagt actaaaagca ccttcatgag ctgtgaaaaa tttaatgcat ttatttacat    240
atttagtttt aaattttagt atattgttag ttgaggtata gtttccaaac aaagagccgt    300
gaaatgttta gtaactgtct ctgtacctct ggatgaggac agctcagccg ggaatggagg    360
gggactgggt gaggagacca gaatgtcagt gtggccacgc agcacacttt tgttttgtct    420
tctgtccttg agcactggct tgttcctgga taaactaggc ataataatac ctatcctgct    408
gtgtgggtgg aaggttaaat gtgataatga tgtgtgtgag atgcctgcac agtgcctgga    540
ggtattgaag aattatttgc tgccttttct ttttctacct accacttacc cgctaccccc    600
gggtgctaca tgttagaaaa cactgtgtaa agtgtggatg cttctgaaaa atctccctgc    660
cagcagttag tgccaatagc gtgcagaaa taagatgcaa tgatttggct tcttttctgt    720
ttggcaataa gaagcttatt tgcacatagc ctgatttctt tcaatctgcn    770
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<210> 331
<211> 1276
<212> DNA
<213> Homo sapiens

<400> 331
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tcgacccacg cgtccgccca cgcgtccgct taatatctgt attcccagtt gcctacggga    60
taaaagccca aactccttag cagagaatat aaggccctag ctcccacatt atttcagcag    120
tcatcaccca ctatgttcct caagactgca gccattaact ttttagagtt ccctaaacat    180
gctgtttact ttcatgcctc tatcccgttg tctgtggaat gacttccctc cttgcccttt    240
tcagtgctac aaaccccctat tctttaagac atagtacaaa tggcatctcc tggttggcat    300
ctttcctgca ggcctacagg cctagtaagt atcttcctcc tctgtgctcc tgcatacctc    360
cattcctttg ttatgacatc tataacttta ataagtacta aaatctgtag tcctacaaaa    420
ctcaggcata gaactcattt cctttatggy tctataatgg aactttaccc aactctcag    480
ttccccatga ccacagatgt ggaaaatttg aatcttgaca gttcaaggtg aactcagtca    540
ttttcagagt tttcatagtc ccttcaagat tgaaactcag ttcctgcaat gtttgcccct    600
tttctcctct tttgtctatg ctgggagagg cattgtgggg agggttgtct ggcttatggc    660
tcccattgtc ctctgcttga taaccacct gagctttggt cattagcagt ctcctgtgcc    720
tttcacactc aggtagtgtc tgcacaggcc actctatgtc ttttccatgc tgaagaaatt    780
cctttccagg ccatgtctgt gttcctcctg ccacacagga aatttttgag catgttcatc    840
ctccaagctg aatgcagggt cttgggtagt ggtcctcacc tgctccagag actctccag    900
ccattgccac tctccactca ggtgatgaag ctggatgagg gactgcaccc accagagtca    960
ggccagggtc ctgtctgctc tgtgagtccc tccaattgtt cttattccga gatttccatt   1020
gttctgcccc ctcttgactc ccagggctct caagggagtg ggggtagtga agggagccct   1080
ttcccaagct ccccccaagag ctctagtcac atcacttctg atacttcttt tcccaccagc   1140
tggaagaaag aactttcatt tgtcttgaaa tgagaaaaat gttcttagaa tattttgtat   1200
tactctctgc tctgtcattt atggtaaaca aaataaaata ataaaaaaaa aaaaaaaaa   1260
aaaaaaaagg gcggcc   1276
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<210> 332
<211> 1237
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (942)..(942)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (949)..(1184)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1187)..(1187)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1194)..(1194)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1196)..(1196)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1218)..(1218)
<223> n equals a,t,g, or c

<400> 332
gcaacctggg cttttataca gaagaatacg aatcacaggt gtgtgagcat ctacttaatt   60
aatttgctta cagccgattt cctgcttact ctggcattac cagtgaaaat tgttgttgac   120
ttgggtgtgg caccttggaa gctgaagata ttccactgcc aagtaacagc ctgctcatc   180
tatatcaata tgtatttatc aattatcttc ttagcatttg tcagcattga ccgctgtctt   240
cagctgacac acagctgcaa gatctaccga atacaagaac ccggatttgc caaaatgata   300
tcaaccgttg tgtggctaat ggtccttctt ataatggtgc caaatatgat gattcccatc   360
aaagacatca aggaaaagtc aaatgtgggt tgtatggagt ttaaaaagga atttggaaga   420
aattggcatt tgctgacaaa tttcatatgt gtagcaatat ttttaaattt ctcagccatc   480
attttaatat ccaattgcct tgtaattcga cagctctaca gaaacaaaga taatgaaaat   540
tacccaaatg tgaaaaaggc tctcatcaac atactttag tgaccacgg ctacatcata   600
tgctttgttc cttaccacat tgtccgaatc ccgtataccc tcagccagac agaagtcata   660
actgattgct caaccaggat ttcactcttc aaagccaaag aggctacact gctcctggct   720
gtgtcgaacc tgtgctttga tcctatcctg tactatcacc tctcaaaagc attccgctca   780
aaggtcactg agacttttgc ctcacctaaa gagaccaagg ctcagaaaga aaaattaaga   840
tgtgaaaata atgcataaaa gacaggattt tttgtgctac caattctggg cttttattgga   900
ccataaagtc tattatagct tggaaggtta aaaaaaaaaa anaaaaagnn nnnnnnnnnn   960
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn   1020
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn   1080
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn   1140
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnccnaat gggncncgcc   1200
cctggtttcc gggcccntt taatccccgg gcggggt   1237

<210> 333
<211> 1045
<212> DNA
<213> Homo sapiens

<400> 333
tcgacccacg cgtccgagat gcacgaactg attaattcat ttgttctagg gctctgagga   60
gtcgtctact taaccttttg ggttgctggt cttacctatg tctcacgcc tccatttct   120
cacccactca ctcagccttc tccatttacc ctcccaagtc tttggcgagg tacactcatc   180
ctgcgtatca tcactgccat gtcctgatac cccagctctg ccatattgcc cttcttttt   240
gcggtatgat gaccacatag aggcccaacc tcttaaacac atcaatacca atgatcacat   300
ttcaatctag acttctaagc aacggctgaa atctctccag gccaaggag agtttgtatc   360
accttaccag aagcttctcc ggaacaattg gccagaagcc tagagttcag aaacccagac   420
acatgcagta agcaatttcc agtttctcta taatttagaa gaggacacca tgatatgtaa   480

246

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tgcggggtct ggaggttgga atgcctccat aaaacæctg ccatattttt tggtccaagc    540
cttagtgtta taaatcaaga aggctgtaaa taagacttca gcyttttgtg ctggtgaagt    600
ttgtttcctt taacttatcc tccaagagta ccgaggcacc gagatctacc atttgccacc    660
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tgactgtgtg gggcttctgc aaaggttgca tcacgagtcc tatttctgag ctatctgaga    780
tccccattaa gaatttaaaa gcaataaaat aacggagatt tttgactatc aacatgaatg    840
ctgtgtgggc ttttacagtt aatgattgcc cttgagtgct gaataatctg tggcctgaaa    900
aaagaaatgt tcttatcttc taaattggt aatcaagaac aagatagagt aatgaatgta    960
aaggaacact gttgcaagtt gagtgtttcc aaaaaaaaaa aaaaaaaag ggcggccgct   1020
ctagtaggat accaagtctt tacgt                                         1045


<210> 334
<211> 1223
<212> DNA
<213> Homo sapiens


<400> 334
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atgtacagat ggggtttgg tgtggatgtc ctttctgttt gttagttttc cttctaacag    120
tcaggacccg cagcttcarg tctgttggag tttgctggag gtccactcca gaccctcttt    180
gcctgggtat cagcagcaga agctgcagaa cagcggatat tggtgaacag cagatgttgc    240
tgcctgatcg ttcctctgga agtttttgtct cggagtaccc agccatgtga ggtgtcagtc    300
taccoctact gggggatgcc tcccagttag gctacttggg agtcagggac gcacttgagg    360
aggcactctg tctgttctca gatgtccagc tgtgtgctgg tagaaccagt gctctyttca    420
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gccctgcccc ccagaggtgg agtctacaga ggcaggcagg cctccttgaa ttgcggtggg    540
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aatgaktrag gctctgtggg tgtagraccc tctgagccag gcatgggata taatctcctg    720
gtgtgcgatt tgctaagacc cattggaaaa gcgtagtatt agggtgggaa tgacccaatt    780
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actgtcttgc acccacttttc caacactccc tagtgagatg aacccggtac ctcagttgga    960
aatgcagaaa tcacacgtct tctgcgtcct cacgctggga gctgtagact ggagctgttc   1020
ctattcggcc atcttggctœ cacctgtcga gatattttac attaacttttc tatgacatac   1080
ttatagcaaa acttatttttt tcatgcagaa tagtctatat tctatattta ttgtaaagca   1140
tataccgtac atggtgacta gtcaccatgc tgtacaataa attttctgaa cttaataaaa   1200
aaaaaawaaa aaagggcggc cgc                                          1223


<210> 335
<211> 1267
<212> DNA
<213> Homo sapiens


<400> 335
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caagacacag tgtagggœc ggcccgtgtt ggccccagga ctcctttgga atatagctgt    180
ggacaatgaa tcctgcgagc gatgggggca catcagagag catttttgac ctggactatg    240
catcctgggg gatccgctcc acgctgatgg tcgctggctt tgtcttctac ttgggcgtct    300
ttgtggtctg ccaccagctg tcctcttccc tgaatgccac ttaccgttt ttggtggcca    360
gagagaaggt cttctgggac ctggcggcca cgcgtgcagt ctttggtgtt cagagcacag    420
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gcagtccacc tgtccaactt gatcttccgg acatttgact tgtttctggt tatccaccat    600
ctctttgcct ttcttgggtt tcttggctgc ttggtcaatc tccaagctgg ccactatcta    660
gctatgacca cgttgctcct ggagatgagc acgcccttta cctgcgtttc ctggatgctc    720
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247

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ttaaaggcgg gctggtccga gtctctgttt tggaagctca acagtggct gatgattcac      780
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gacggcctgg tcagcagcct gtatctgcct catttgacac tgttccttgt cggactggct      900
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ccggtggact ggaacttcgc acagccagaa gccaagagca ggccagaagg caacgggcag     1020
ctgctgcgga agaagaggcc atagctgctc cagccggggc tccggggcgg cagcagagct     1080
ggcacaccga ttctgggaag ccccgcgaat gatggctttt gaattaatga ggcagtgaat     1140
gttttgtgtt tacttctaag ggaaatacta actttcttc gcattagtat taattttgaa      1200
gtagctacaa agtattttta agaaattata attttatgac tgtcaaaaaa aaaaaaaaa      1260
aaaaaaa                                                                1267


<210> 336
<211> 3194
<212> DNA
<213> Homo sapiens

<400> 336
cacctcttcc cctcccccgc ttccctgtcg cgctccgctg gctggacgcg ctggaggagt       60
ggagcagcac ccggccggcc ctgggggctg acagtcggca aagtttggcc cgaagaggaa      120
gtggtctcaa accccggcag gtggcgacca ggccagacca ggggcgctcg ctgcctgcgg      180
gcgggctgta ggcgagggcg cgccccagtg ccgagaccg gggcttcagg agccggcccc      240
gggagagaag agtgcggcgg cggacggaga aaacaactcc aaagttggcg aaaggcaccg      300
cccctactcc cgggctgccg ccgcctcccc gcccccagcc ctggcatcca gagtacgggt      360
cgagcccggg ccatggagcc cccctgggga ggcggcacca gggagcctgg gcgcccgggg      420
ctccgccgcg accccatcgg gtagaccaca gaagctccgg gacccttccg gcacctctgg      480
acagcccagg atgctgttgg ccaccctcct cctcctcctc cttggaggcg ctctggccca      540
tccagaccgg attattttc caaatcatgc ttgtgaggac cccccagcag tgctcttaga      600
agtgcagggc accttacaga ggcccctggt cgggacagc cgcacctccc ctgccaactg      660
cacctggctc atcctgggca gcaaggaaca gactgtcacc atcaggttcc agaagctaca      720
cctggcctgt ggctcagagc gcttaaccct acgctcccct ctccagccac tgatctccct      780
gtgtgaggca cctcccagcc ctctgcagct gcccgggggc aacgtcacca tcacttacag      840
ctatgctggg gccagagcac ccatgggcca gggcttcctg ctctcctaca gccaagattg      900
gctgatgtgc ctgcaggaag agtttcagt cctgaaccac cgctgtgtat ctgctgtcca      960
gcgctgtgat ggggttgatg cctgtggcga tggctctgat gaagcaggtt gcagctcaga     1020
ccccttccct ggcctgaccc caagaccgt cccctccctg ccttgcaatg tcaccttgga     1080
ggacttctat ggggtcttct cctctcctgg atatacacac ctagcctcag tctcccaccc     1140
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agccctggac ttgggctttg gagatgcagt gcatgtgtat gacggccctg ggcccctga     1260
gagctcccga ctactgcgta gtctcaccca cttcagcaat ggcaaggctg tcactgtgga     1320
gacactgtct ggccaggctg ttgtgtccta ccacacagtt gcttggagca atggtcgtgg     1380
cttcaatgcc acctaccatg tgcggggcta ttgcttgcct tgggacagac cctgtggctt     1440
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tgctgaccgc tgcaactacc agactttctg tgctgatgga gcagatgaga gcgctgtcg     1680
gcattgccag cctggcaatt ccgatgccg ggacgagaag tgcgtgtatg agacgtgggt     1740
gtgcgatggg cagccagact gtgcggacgg cagtgatgag tgggactgct cctatgttct     1800
gccccgcaag gtcattacag ctgcagtcat tggcagccta gtgtgcggcc tgctcctggt     1860
catcgccctg ggctgcacct gcaagctcta tgccattcgc acccaggagt acagcatctt     1920
tgcccccctc tcccggatgg aggctgagat tgtgcagcag caggcacccc cttcctacgg     1980
gcagctcatt gcccagggtg ccatcccacc tgtagaagac tttcctacag agaatcctaa     2040
tgataactca gtgctgggca acctgcgttc tctgctacag atcttagcc aggatatgac      2100
tccaggaggt ggcccaggtg cccgccgtcg tcagcggggc cgcttgatgc gacgcctggt     2160
acgccgtctc cgccgctggg gcttgctccc tcgaaccaac acccccggctc gggcctctga     2220
ggccagatcc caggtcacac cttctgctgc tcccccttgag ccctagatg gtggcacagg     2280
tccagcccgt gagggcgggg cagtgggtgg gcaagatggg gagcaggcac ccccactgcc     2340
catcaaggct cccctcccat ctgctagcac gtctccagcc cccactactg tccctgaagc     2400
```

248

```
cccagggcca ctgccctcac tgcccctaga gccatcacta ttgtctggag tggtgcaggc   2460
cctgcgaggc cgcctgttgc ccagcctggg gcccccagga ccaacccgga gccccctgg    2520
accccacaca gcagtcctgg ccctggaaga tgaggacgat gtgctactgg tgccactggc   2580
tgagccgggg gtgtgggtag ctgaggcaga ggatgagcca ctgcttacct gaggggacct   2640
gggggctcta ctgaggcctc tcccctgggg gctctactca tagtggcaca acctttaga   2700
ggtgggtcag cctcccctcc accacttcct tccctgtccc tggatttcag ggacttggtg   2760
ggcctcccgt tgaccctatg tagctgctat aaagttaagt gtccctcagg cagggagagg   2820
gctcacagag tctcctctgt acgtggccat ggccagacac cccagtccct tcaccaccac   2880
ctgctcccca cgccaccacc atttgggtgg ctgttttaa aaagtaaagt tcttagagga    2940
tcataggtct ggacactcca tccttgccaa acctctaccc aaaagtggcc ttaagcaccg    3000
gaatgccaat taactagaga ccctccagcc cccaagggga ggatttgggc agaacctgag    3060
gttttgccat ccacaatccc tcctacaggg cctggctcac aaaaagagtg caacaaatgc    3120
ttctattcca tagctacggc attgctcagt aagttgaggt caaaaataaa ggaatcatac    3180
atctcacctc gtgc                                                       3194
```

<210> 337
<211> 1258
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1196)..(1196)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1200)..(1200)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1237)..(1237)
<223> n equals a,t,g, or c

<400> 337
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nagatggcgc tacgtctgct gcggagggcg gcgcgcggag ctgcggcggc ggcgctgctg     60
aggctgaaag cgtctctagc agctgatatc cccagacttg gatatagttc ctcatcccat    120
cacaagtaca tcccccggag ggcagtgctt tatgtacctg gaaatgatga aaagaaaata    180
aagaagattc catcctgaa tgtagattgt gcagtgctcg actgtgagga tggagtggct     240
gcaaacaaaa agaatgaagc tcgactgaga attgtaaaaa ctcttgaaga cattgatctg    300
ggccctactg aaaaatgtgt gagagtcaac tcagtttcca gtggtctggc ggaagaagac    360
ctagagaccc ttttgcaatc ccgggtcctt ccttccagcc tgatgcacc aaaggtggaa     420
agtcctgaag aaatccagtg gtttgcagac aaattttcat tccacttaaa aggccgaaaa    480
cttgaacaac caatgaattt aatccctttt gtggaaactg caatgggttt gctcaatttt    540
aaggcagtgt gtgaagaaac cctgaaggtc gggcctcaag taggtctctt tctagatgca    600
gtcgttttg gaggagaaga ctttcgagcc agcataggtg caacaagtag taaagaaacc    660
ctggatattc tctacgcccg gcaaaagatt gttgtcatag cgaaagcctt tggtctccaa    720
gccgtagatc tggtgtacat tgactttcga gatggagctg ggctgcttag acagtcacga    780
gaaggagccg ccatgggctt cactggtaag caggtgattc ccctaacca aattgccgtg     840
gtccaggagc agttttctcc ttcccctgaa aaaattaagt gggctgaaga actgattgct    900
gcctttaaag aacatcaaca attaggaaag ggggccttta ctttccaagg gagtatgatc    960
```

```
gacatgccat tactgaagca ggcccagaac actgttacgc ttgccacctc catcaaggaa    1020
aaatgatctg ttaaatgaag ctgtcatcag gctaaagggt attgaagctg cagagggatc    1080
aacttgtgct tgccagagga cgccaatgaa gtttgaaaca ccaacaatca gagattttgt    1140
ttctgttcct cattaaatca tgagcttttg tgcccgagac tctggacgga ctgttncttn    1200
aggaatttaa ccggatggga agttttttaa actttncaa ccaacttttt taaggccc      1258
```

<210> 338
<211> 698
<212> DNA
<213> Homo sapiens

<400> 338
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gtctagttta tgttttccca ctggacaggg agctccttga ggaccttgtc ttgctcgctg     60
cccccaccct aaaacttgct gtaaagcagt tcctggaaca gagcaggtgc tcagtagtac    120
tggttgcatg aatgaatgaa tgaatgaata ggttttcctc ttttagacac attgggagat    180
gggcctatgg tttcctatgc tcattttgac ccagagattt gtgtcctgtg actcacatcc    240
agacccaaaa cacacacata cacacgcaca cataaataca cacacacaca gacacgtgca    300
cacacagaca cacatgcaca cacacataca cacacttgg tttgaagaga agagggatgg    360
gaacagacat tctacgcatg cctacagtgc accactgtgc ataggtaact gatgctgtat    420
aagcactcaa ggattatctc catttttagc cagagaaact gaggcttgct ttctgctgtg    480
tctccagtgc ctagcactgt gcctggcata aacatctgct gaactgaatt gcactagatt    540
caagaggctc agaaaacagt tcaaggtcac ccaactagca agttgtggag ccagaatctg    600
tgctcagggc tgttcagtcc ccagccagtg ccgggtagca gccataggca cctgcacaaa    660
ctccagcgac ctcgttaact tccaaacacg gtctcgta                           698
```

<210> 339
<211> 996
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (834)..(834)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (996)..(996)
<223> n equals a,t,g, or c

<400> 339
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gaattcggca gagggaatct gggctctgtg gaagaatagc acttatctgg attctggcct     60
tgtgccatga acctaaagca catccgtttg gtctgccagt aggctggtat ggcatgctgt    120
aacccctata aatattattt ctatttatcc tgctcagtgt gtttcctgta acaaatcgtt    180
caagaaactc tggtcccttc atgaacatat caagatcgtc catggatatg cagaaaagaa    240
attttcctgt gaaatttgtg agaagaaatt ctataccatg gctcatgtgc ggaaacacat    300
ggttgcacac acaaaagaca tgccattaca tgcgaaacct gtggaaaatc attcaaacgc    360
atatgtcact caaggtgcac tccktgcagc attctrgaga gaagcccttt agatgcgaga    420
actgtgacga aaggtttcag tacaagtacc agctacgctc ccacatgagc attcaatttg    480
ggcacaaaca gttcatgtgc cagtggtgtg gcaaggattt caacatgaag cagtacttcg    540
acgaacacat gaaaacacac actggagaga aaccctttat ctgtgaaatc tgtggcaaaa    600
gcttcaccag ccgccccaac atgaagagac accgcagaac tcacacaggc gagaagccct    660
atccatgtga tgtgtgtggc cagcggttcc gcttctcgaa catgcttaag gcccacaagg    720
agaagtgctt tcgggtgacc agccccgtgg aatgtgccac ctgctgtcca gatcccactt    780
acaacttccc cagccacccc agttccttct gtggtgaaca gccacaac cccnaccctc     840
caatcaatat gaatcctgta agcactcttc ccctcgggcc atcccccacccc ttctcaca    900
ccgcacatcc acccacaccc tcaccaccca caccamcttc ccatccctcc aktccctcac    960
```

```
ctcccgccac ctccagctct ctttaagagt gagccn                              996

<210> 340
<211> 974
<212> DNA
<213> Homo sapiens

<400> 340
caggagtaaa gaactttatg agttcatgag aacctaaggc tcagtatttg aaaattactg      60
acttatgaga aagcaggcat gtaaataaaa aataaaaaat gttggcccta gattttgata     120
tgtgtgtggt gtgtggtgta ggagaggccc tgatatttac ctgtaagtgt tagagttgta     180
tgaaaaaggt ggcaagattg agtagcttag ggcatgtggt gtggaggctg tatgctagag     240
ttttggcatt aataacttgt attttctggg ttttggcatt aataatttgt attttcactc     300
cccaaatatt tttcaagcat ctacttcatg ccagaccttg ttctagatac cggagataca     360
acagcaaaaa tacagatctt gcccttatga agcttaaatt gttgaggcag gcagacagtg     420
ataaataaat acatagaatg ttgggaaaga aaataagagg atttgagagg gtggaatggg     480
gaagaaagga ttcactgata agatgccatt cgagctaaga cctgaaaagg tgatctctaa     540
ggtgaggaaa gagctttcta cacagaagga acagctgggg gaagggagca cgcttggaat     600
atttaaggaa tatcaaggag ggaaaagtgg ctagagtaga ggaaggaat ggaagaagtc     660
atgtcaaaca ggtactaatg gaagaagtca tgtcagacag ggtcttgccc attgtaagga     720
ctttggcctt atacctcagc aagctgagca gccgtcggaa tgttttaagc aaaagagtga     780
caccatcttt aaaagggacc ccttgtaagg attcagaaca gacttggagg gaaaacaagt     840
agaagcagca gggggactag ttaggaggct gaggtgggag gattgcttgg gcctgggagg     900
ttgaagctgc agtgagtcat gatcactcca ctgcactcca gcctgggcga cagaaggaga     960
ccctgtctca gaaa                                                      974

<210> 341
<211> 413
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (248)..(248)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (328)..(328)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (357)..(357)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (372)..(372)
<223> n equals a,t,g, or c

<400> 341
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nggcccattc gctgttgggt cttctgctag ggaggatgtc gggttcgtcg ctgcccaggg        60
ccctggccct ctcgctgttg ctggtctctg gctccctcct cccagggcca ggcgccgctc       120
agaacgtgaa gagtacaatc tggacaggat cagaagtaga gaatgaagtt gtaaagagaa       180
aggggaaaga cagaagaaag gctgcagtag tacaaggaga aaagcaggat gcaagattga       240
aggaatgnaa tctttgtttg aggagcattc cggaaaatta taagctgttc agaaagggtt       300
aattagacca gggacctttt aagttaantt cacactcaaa gttaaaataa tgttggngat       360
tcactcctgt gnaaaattgg gttagttttc atttgccctt ttaaacaaaa ctt             413
```

<210> 342
<211> 1010
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (607)..(607)
<223> n equals a,t,g, or c

<400> 342
```
ggttacttcc aagttctgcc aactgtgaat aaagttgcta taaacatcta tgtacaggtt        60
ttttttgtgt gtggacctaa gttttcaact cctttgggtg ataccaagga gcacagtcac       120
tgggacatat ggtaaggata tatttagttt ggcaggaaac caccatactg tcttccaag        180
tagctgtacc attttgcata cccaccagca ctgaatgaga gttcctgttg ctccacattc       240
ttgtcagcat ttgatgttgt cagtgttctg aatttaggta gtcatgatag gtgtgtaatg       300
gtatctcact attattttaa tttgcctttc tctgatgatg tatgatgttg cagatcttct       360
catatgctta tgtgacatct gtatatctgg tgaaatgtct gctaaggtct tascctattt       420
tttaatargg atggttgttt tcccattgtt gagttttaag agttccttat atattttgga       480
tatttaaata tactacaaat aaacagtcct ttaacagata aatgtttttgc aaatattttc       540
tcttagtctg tggcttctgt ctttattccc ttgaaggtgt ctgtcacaaa gagtttatc        600
ttttttnctt tttttttttt tttgagacgt agtcttgctc cagcctgggt ggcagagcga       660
rctacgtctc aagaaacaaa acaaaacaaa aaaacacctc agttgcgcgg caaggtkgct       720
cacgcctgtg atcccatcac tttgggaggt cggaggtggg aggtgggaga atcgcttgag       780
gccaggagtc catcctaggt ctagcttgac cctatctcaa caacaaaaaa ataacaatta       840
gcccaccgtg gtagtgcatg tctgtagtcc tagctactgg ggaggctgag gtgagaggat       900
tgcttgagcc catgagtttg aggttacagt gggctataat tacaccactg cactccagtc       960
tgagtgacag agcaagaccg tgtctcaaaa aaaaaaaaaa aaaactgag             1010
```

<210> 343
<211> 1337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (22)..(22)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1318)..(1318)
<223> n equals a,t,g, or c

<400> 343
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cggggcttcg gcgccaggcc angcgctagt cggtctggta aggatttaca aaaggtgcag        60
gtatgagcag gtctgaagac taacattttg tgaagttgta aaacagaaaa cctgttagaa       120
atgtggtggt ttcagcaagg cctcagtttc cttccttcag cccttgtaat ttggacatct       180
gctgctttca tattttcata cattactgca gtaacactccaccatataga cccggcttta       240
```

252

```
cctttatatca gtgacactgg tacagtagct ccagaaaaat gcttatttgg ggcaatgcta    300
aatattgcgg cagttttatg cattgctacc atttatgttc gttataagca agttcatgct    360
ctgagtcctg aagagaacgt tatcatcaaa ttaaacaagg ctggccttgt acttggaata    420
ctgagttgtt taggactttc tattgtggca aacttccaga aaacaaccct ttttgctgca    480
catgtaagtg gagctgtgct tacctttggt atgggctcat tatatatgtt tgttcagacc    540
atcctttcct accaaatgca gcccaaaatc catggcaaac aagtcttctg gatcagactg    600
ttgttggtta tctggtgtgg agtaagtgca cttagcatgc tgacttgctc atcagttttg    660
cacagtggca attttgggac tgatttagaa cagaaactcc attggaaccc cgaggacaaa    720
ggttatgtgc ttcacatgat cactactgca gcagaatggt ctatgtcatt ttccttcttt    780
ggttttttcc tgacttacat tcgtgatttt cagaaaattt ctttacgggt ggaagccaat    804
ttacatggat taaccctcta tgacactgca ccttgcccta ttaacaatga acgaacacgg    900
ctactttcca gagatatttg atgaaaggat aaaatatttc tgtaatgatt atgattctca    960
gggattgggg aaaggttcac agaagttgct tattcttctc tgaaattttc aaccacttaa   1020
tcaaggctga cagtaacact gatgaatgdt gataatcagg aaacatgaaa gaagccattt   1080
gatagattat tctaaaggat atcatcaaga agactattaa aaacacctat gcctatactt   1140
ttttatctca gaaaataaag tcraaagact atgawawmaw agttttttat accttatta   1200
agagaaacaa cctgacgtgc accawtcagt ctgcacatcc caacccttca cattttataa   1260
attattgtag atcatgtttt gttaggagcc cttttatgga gaggacattt tcccatgnct   1320
taagtaatcc agccttt                                                   1337


<210> 344
<211> 1420
<212> DNA
<213> Homo sapiens

<400> 344
ggcacgagca caagctcaag aggccgcttg cacgcatgtg gacactccat gattctgctt     60
ctatctctct ttcagggcgt gcgaggcagc ctgggctccc ctggaaatcg ggaaaacaag    120
gagaagaagg tcttcatcag cctggtaggc tcccgaggcc ttggctgcag catttccagc    180
ggccccatcc agaagcctgg catctttatc agccatgtga aacctggctc cctgtctgtc    240
gaggtgggat tggagatagg ggaccagatt gtcgaagtca atggcgtcga cttctctaac    300
ctggatcaca aggagctgca gctggccggg agctgttcat gacagaccgg gagcggctgg    360
cagaggcgcg gcagcgtgag ctgcagcggc aggagcttct catgcaaagg cggctggcga    420
tggagtccaa caagatcctc caggagcagc aggagatgga gcggcaaagg agaaaagaaa    480
ttgcccagaa ggcagcagag gaaaatgaga gataccggaa ggagatggaa cagattgtag    540
aggaggaaga gaagtttaag aagcaatggg aagaagactg gggctcaaag gaacagctac    600
tcttgcctaa aaccatcact gctgaggtac acccagtacc ccttcgcaag ccaagtatg     660
atcagggagt ggaacctgag ctcgagcccg cagatgacct ggatggaggc acggaggagc    720
agggagagca ggatttccgg aaatatgagg aaggctttga cccctactct atgttcaccc    780
cagagcagat catggggaag gatgtccggc tcctacgcat caagaaggag ggatccttag    840
acctggcccct ggaaggcggt gtggactccc ccattgggaa ggtggttgtt tctgctgtgt    900
atgacgcgggg agctgctgag cggcatggtg gcattgtgaa aggggacgag atcatggcaa    960
tcaacggcaa gattgtgaca gactacaccc tggctgaggc tgacgctgcc ctgcagaagg   1020
cctggaatca gggcgggggac tggatcgacc ttgtggttgc cgtctgccc ccaaaggagt   1080
atgacgatga gctgaccttc ttctgaagtc caaaagggga aaccaaattc accgttagga   1140
aacagtgagc tccggcccca cctcgtgaac acaaagcctc ggaccagcct tgagagaggc   1200
cacactattc ctttcctctg gcccagtgaa tttggtctct cccagctctg ggggactcct   1260
tccttgaacc ctaataagac cccactggag tctctctctc tccatccctc tcctctgccc   1320
tctgctctaa ttgctgccag gattgtcact ccaaacctta ctctgagctc attaataaaa   1380
taaacagatt tattttccag cttaaaaaaa aaaaaaaaaa                          1420


<210> 345
<211> 1674
<212> DNA
<213> Homo sapiens

<220>
```

253

<400> 345
```
cccgagcagc tgagtccctt ccctgtcttt cactcttctg gcatcggtgg ttttacttct        60
tcgattgaac cctgcttcct cgaccccct gggaggccgc cttcttcagg cgcctccctt        120
ctctccacga gctcgctctg acagctgagg aactggcaag atcctgctac ccagagggtg        180
aatgggtatc tttcccggaa taatcctaat ttttctaagg gtgaagtttg caacggcggc        240
cgtgattgta agcggagtaa gcaaacacct ccattgtatt agtcaccaga aaagtaccac        300
tgtaagtcat gagatgtctg gtctgaattg gaaacctt gtatatggcg gccttgcctc        360
tatcgtggct gagtttggga ctttccctgt ggaccttacc aaaacacgac ttcaggttca        420
aggccaaagc attgatgccc gtttcaaaga gataaaatat agagggatgt tccatgcgct        480
gtttcgcatc tgtaaagagg aaggtgtatt ggctctctat tcaggaattg ctcctgcgtt        540
gctaagacaa gcatcatatg gcaccattaa aattgggatt taccaaagct tgaagcgctt        600
attcgtagaa cgtttagaag atgaaactct tttaattaat atgatctgtg gggtagtgtc        660
aggagtgata tcttccacta tagccaatcc caccgatgtt ctaaagattc gaatgcaggc        720
tcaaggaagc ttgttccaag ggagcatgat tggaagcttt atcgatatat accaacaaga        780
aggcaccagg ggtctgtgga ggggtgtggt tccaactgct cagcgtgctg ccatcgttgt        840
aggagtagag ctaccagtct atgatattac taagaagcat ttaatattgt caggaatgat        900
gggcgataca attttaactc acttcgtttc cagctttaca tgtggtttgg ctggggctct        960
ggcctccaac ccggttgatg tggttcgaac tcgcatgatg aaccagaggg caatcgtggg       1020
acatgtggat ctctataagg gcactgttga tggtatttta aagatgtgga aacatgaggg       1080
cttttttgca ctctataaag gattttggcc aaactggctt cggcttggac cctggaacat       1140
cattttttt attacatacg agcagtaaa gaggcttcaa atctaagaac tgaattatat       1200
gtgagcccag ccctgccagc ctttctactc ctttgccctt ttcccgtgtt ctaatgtatt       1260
ttgacaatgt tgtaagtgtt taccaagccg ttggtctcct aagggcctcc tgatggaaga       1320
acagtggggt ggttcaaagt tatttctatg tttgtgttac catgttaact tttccgag       1380
agaaagtgtt aacattgaga ctctggcccc agattggtat cttctatgaa gatggatact       1440
gatgggtgac attgaaaacg gcctgctttc caaatgtggt taaatgtaat tggttagccc       1500
cagacttggg ctagagcaga aggcataggc cagggtggt attgctatat gtgttacaga       1560
cctcggttct cattaaagta tttattggca gaatcaaaaa aaaaaaaaaa aaaaaaaaaa       1620
aaactcgagg gggggcccgg tacccaattc gccctatggt gantcgaatg ggct            1674
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<210> 346
<211> 921
<212> DNA
<213> Homo sapiens

<400> 346
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ggaactgctg ctcatggaac tggctcctct cctcttgcca cttgagtctg ttcgagagt        60
ccagggaaga acttgaagag caaaatacac tcttgagttt gttgggtttt gggagaggtg        120
acagtagaga aggggggttgt gtttaaaata aacacagtgg cttgagcagg ggcagaggtt        180
gtgatgctat ttctgttgac tcctagcagc catcaccagc atgaatgtgt tcgtagggcc        240
tttgagtgtg gcgattgtca tattctgttg gataacaatg tattgggtgt cgattgtcat        300
ggggcagggg agagggcagt acacctggag gaccattttg tccacatcga caccatcagt        360
ctgctcttag aggatgccct ggagtattcg gcgttgattg cggggcaccc gaaatcagac        420
ttgccacctg gactgtcgag gtgcagaccc tgggagcacc actggcccat tcttacaca        480
ggctgaccga tttctcctgg tgttcagagt ctgtttttgt ctagcaccat ttgaaatcgg        540
ttatgatgta gggggaaaag cagcagcctc gaagcctcat gccaactctg gcagcagca        600
gcctgtggtt tcctggaaga tggatgggca gagaataggg aaggaagatc atgctttttcc        660
ctactaactt ctgtaactgc atgtatgata cattattgca gaggtaagag atagtttaat        720
ggattttaa aaacaaatta ctataattta tctgatgttc tctagttgca ttttgctgaa        780
atgtagtgct gttctaaatt ctgtaaattg attgctgttg aattatcttt ctgttgagaa        840
gagtctattc atgcatcctg accttaataa atactatgtt cagttaaaa aaaaaaaaaa        900
aaaaaaaaaa agggcggccg c                                                 921
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<210> 347
<211> 822
<212> DNA
<213> Homo sapiens

<400> 347
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ccgggttgac ccacgcgtcc gcggacgcgt gggcaaatat tggtaatgct gggaaaaggg      60
agttcagaat gccaaaacgt ttctggtttt atttgtcttg ggtgaggacc cagaggggtg     120
ggagatggag gtgtgagcag catggtctgt tgtggttttt tcttgttgtg gagtagagtt     180
agatcataca tgaagctctc tgggcatagg tggagtagca gctgtccaca ccattgctat     240
tcaaagtgtg gtttgcacac cagtaatgga aaatcatctg tgcacatgt ttagtttaac      300
tgatactttt tttttcatag caagatttct taatgaagga agtaatgtat tgatttacat     360
tctgactcat tgtctttatc ttgtctttga tcagtttgta gactggcact ggtccacact     420
ttgaataaca ctattcttca ttctactttc catgtacccg gatgccaggc aaacagggag     480
tttttacgctg ggtggagaac ggaacattct gctgactcct tgaaagggct tatctcacca    540
ggcatggtag ctcacgactg taatcccagc tctttgggag gctgaggtgg gaggattgct     600
tgagctcagg agtttgagac cagcctgggt aacatagggga taccttgtcc ctacttaaaa    660
aaaaaaaaaa aaaaattagc tgggtgtggt tgtgcacacctgtagttcca gctattccar    720
aggctgaggc aggaggatag gttgagcatg ggargttgag ctgcartgt gccttgatgg      780
cgccactgca ctccatcctg gttgacaaaa aaaaaaaaaa aa                        822
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<210> 348
<211> 706
<212> DNA
<213> Homo sapiens

<400> 348
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ggcagaggtg acaagccccg ccaagacaga cctgcaagtc ttcgtctcaa gggacctccc      60
tcatgccagg cccctgcctc tcacagcagc acccttctt ctcattgtcc ctgttcccctt     120
tttgcctgtg gatctgtttg gccagggtcc ctggggtcag gaatatttgc aagactcagc     180
cagctccttc ccagcccagc ctcttggggc tgggactttctcaccctgcg gcaggcacaa     240
cagatgctgg gacccagtct ctgcccaggt cacagcacaa gtgcacatca gcactatggg     300
gcctatgtcc tgcccagaga cctctgctcc ttcctgctca catccacagt tcagggcacg     360
gcgccctca agaactccag agtcacctgt ctcatcggct cccagcaagt gcctctttgt     420
ctatgatgtc ccccttctct gaggcctgga cccacccatc tttgtccctg gggcctgctc     480
ccagccactg aggcccgctc tggccagggg agaaggagct gccgtgcgtc ttccctgtgc     540
cccgtctccc tgcttggttc tcccctccct tccctggccg gctgccatgg ccaggagcta     600
agtgcctttt tgtgtgcaac cacttaccct ttctcgaaa aacctgttct caggaaggat      660
ctgataaact catttactct yaaaaaaaaa aaaaaaaaaa aaaaaa                     706
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<210> 349
<211> 1726
<212> DNA
<213> Homo sapiens

<400> 349
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cgtctgatta aggtaccttt tgggaaatta aggttctata gaaattactg ggctcaatct      60
agtgatacaa atatgtgttg tttgatttat caacacatta caaaccttaa ctttggagtt     120
ttaatatctg gttatctta atatctggtt atcttctttc tgaagtgtat gtacacaaaa      180
ttgatgctaa ataaggtctt gttgtttttgg caaatagtga aatgcaaggt attggtagat     240
cagtactgtt ataactttgg tgcaaagttg ctgatgcag attggctgtg ggaccttgtt      300
cattttttga gaactaatgt agagtttgaa aaaacaccgt aagcctgcat tccagaagtt     360
ctggtatgga tagtgtgagc ccagggaatg tgcttagata aaagatcatt aacaaatag      420
gttttgcatt tttttagcaa tcaggctttg tgctgaatat tagagtggtt gtttcagaga     408
gtttgcagca attaggcttt attggtgcac taaggagaag cagagaggag aagcaattct     540
tggtaacttc cttggaagtt gcagctaact ctgaaaagtc tgggttgaac taggtaagta     600
actaattcct agaatcaata aactttgcag gagtccgttt gattgtacat gtagctccct     660
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ggaattgcta ttggtcccta aatcatcag ttgtaatgct ggttttcaaa cttgagtgca      720
catcaagttt tggaggactt gttagaatac agattgctgg gctcacccc agagtttctg      780
atctggtagg tctggagcgg gacctggtag attgcatttc taaaaagcat ccaggtaata      840
ctgctgctgt ttgggaaagt acctttgaga tcactggctt acagcaatct caaggtgttt      900
ggattttggg cagggggtgct gtgcaggcgt tgctgggatc tcttcacagc actccactgc      960
atagaggtga gcctccagat gttttcattc attcaacaaa tatatgtacc tattgtgtgc     1020
tgggcactgc ttaagttgcg aggggatatt gtgaagaaag taagcaaaac ccctttgttt     1080
gtagaatttc agtgagcata gtctggggtt aacctgacaa cagtcctact gtttattgat     1140
gcttataggt gagcctattt ctctttctag ctttcttcca cttaatttac tttcttttgg     1200
aattcttgaa tttaataata ataatattga tgttattagt catcactata acttttattt     1260
gagtatgtat tttatgtcag acacagtgtg gctaagtgct ttacatacat tattcatct      1320
aatccttaga aaaaaccctg gtgtattagt cttaatttaa aagatgtact ttggaaaggt     1380
tagtagttta cccaagatta tgcagctagt taaaagtggt gctggggctg ggcttggtgg     1440
ctcacacctg taatcgcagt gctttgggag tctgaggcag gaggatcgct tgacaccagg     1500
agtttgagac taacctggga aacatagcaa gaccccatct ttacaaaaaa taaaaaaatt     1560
agccaggagt gggggtgcac acctgtggtc ccagctactt gggaggctga ggcaggagga     1620
ttgcttgagc cccagaggtt gaggctgcag tgagccatga ttatgccact gcacatctgt     1680
ctgggtgaca gagcaagatc ctgtctccaa aaaaaaaaa aaaaaa               1726
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<210> 350
<211> 1283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (341)..(341)
<223> n equals a,t,g, or c

<400> 350
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gaattcaaag tttaccaaat gtgcaaaatg agcagtttta ccttaggatt attattttta       60
tttatattta ctactgcaga aaattatttg attctttttc agagaaaata ctgtttggtt      120
atattttggg gggagttttg aatttcacat acgaaagaaa taacacagcc ctttcaaact      180
gcctgtgttt caacctgcaa agttttttt gtgctaaaga tttgagcttt gtgaaggatt      240
cccttttgt tccttcttct ccagcaatct cagctacctg ggcgtcctg ctaatgattt      300
ctggggttcc gtgccagggg tcggcaggac aagtgtttca nttgaagctt catttggttt      360
ggagtctctt cctcytctga gccwacaaag ctcgggtcca cgggtactct gscaaaattc      420
atcatcttag ttaggcattt ggcagaatag gtgaggcagg atgaatctt taacaaatgt      480
taatgttgct ttgctgggaa tgtgcagagg ggcatccaag atgagcacac atttaaaagt      540
aaacacatga ataagtggca gtagaattta ttttgcaact ctgagtgcta cagtgtctac      600
tgaattcagt gtattccacg ttcttattac aactaaagac tgggtagaac ggacttctgt      660
taactatgca aagggaaaat ccaagacaag attccgcagg ctgctggtga aaggggtgt      720
tatcatgcag atgtcatcct aacagattag cagagggaag tggaaatgtt cgaggatgtt      780
caatgccmcg ttgttggttw trgcaaamcc actggaaaca mcacaggagt ctaaaaatag      840
aggcctggta gggaaaatgg tacagctacg gaatgcaata ctattgaagc attagaamca      900
atgagcttct gacagcccca gagagtttatt cataatgtgt agttaattta aaaaagaaag      960
tcgagagtca gactctacaa gggcataata cgccattttg gtaaagaaaa tgtgtatgta     1020
gatatgtaaa tagatttgga tacgaattat tgtatatacg aaggaagagt gccaaagcct     1080
acataccacg cttttaatag tttttaatct tcgttattaa agaaagattg agggagatgg     1140
gatttctgtt tttattttat acaaatctgc attgtttgaa ttttttttt ttttacgaca     1200
agctgttatt tctctggga gtttaaaaaa aatacaaaaa aagggaatt cgatatcaag     1260
cttatcgata ccgtcgacct cga                                       1283
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<210> 351
<211> 1552
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1035)..(1035)
<223> n equals a,t,g, or c

<400> 351
ttgcctaagg cccactgtgc caaattagat aatacaagaa gttcatttac actgtagacc   60
agtgacgtca atgactgttt gctctgtgæ accgtttcaa aaatccaaaa tgcagacttt   120
tctctgtgcc atgcaggatg cagctgtgtg tgatatggtt tacagtaata tttctttctc   180
aaagtagcag gcttgttaag gaaaagataa gcaacacatc tggggaaaag ggcaggtggc   240
cagcaatcga tgtggtagct ctttgcccct ctcggacagc aggaattagc ttccccaggc   300
attttctgta tgtgagttgt attgtgggat gtacaaatat catctgttcc tttgggtttc   360
caggccagta gctctctatt ttgggttcaa acatggggttc tcaggccggg cgcggtggct   420
cacgcgtgta atcccggcac tttgggaggc caaggcgggc ggatcacgag gtcgggagat   480
ggagaccatc ctggctaaca tgₜgaaacc ccaactctac taaaaataca aaaaattagg   540
caggcatggt ggcgggtgcc tgtgktcccg gctactcagg aggctgaggc aggagaatgg   600
tgtggacccg ggaggttgga ggttgcagta agccgagatt gcaccactgc mctccagcct   660
gggcaacaga gcgagactcc atctcaaaaa acaaacaaac aaacaaacaa aaætgggt   720
tctcaaaagg catgcccact gtctcccatg gagcttgaca gcccatgcca ttagctctca   780
ctgttaggtt tctggggaag gttcttctac ttgattggaa aatttccaaa taaatctttc   840
cagaagatac tatgcacaca gctaagtggc ctgtctgtgg agtaacccttt ttgtaaacaa   900
acagaaacct aaagcttgₐt gttttggggg gctgcctgtc atctataggt tcatttaggt   960
gtatttagga agaggatcca tgaaaccact ggtttcctgt tacataataa tcattaataa 1020
tgatttaaaa tgtgnacatt gattttttttr aattccraaa tacaagcgta tatggtawat 1080
taagtcaaat ggtatgttca gtgagcgaga tggggcttgg ggcaaaaca tactttgctt 1140
ccaaagagga tacaactctc aaggagattc tttcatcttg cctttaaggt catttaaact 1200
aattcacata atcttcagaa aactaattca catcatctat tcatgtgtaa aatcaaaagg 1260
aagactgttt tcttagtctc tcgttgccta actggccatt tatactacta ggttgattaa 1320
gggatttgcc tttttctgct gatatgggaa caaaaagtct taagcatttt taaaggcaat 1380
ggaaaattca gccacatggg ggaaaattga tattgtcacc attgagttgc tctgtttctt 1440
ggtgaagagt gaatctaatc tgatttcctt cttcatcaga tatgcctctt taacaacaaa 1500
aaaaaaaaaa aaggaattcg atatcaagct tatcgatacc gtgacctcg ta 1552

<210> 352
<211> 1563
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)..(14)
<223> n equals a,t,g, or c

<400> 352
aattcggcac gagncagaaa cctgcggaaa atggtagcga tggcggctgg gccgagtggg   60
tgtctggtgc cggcgtttgg gctacggttg ttgttggcga ctgtgcttca agcggtgtct   120
gcttttgggg cagagttttc atcggaggca tgcagagagt taggcttttc tagcaacttg   180
ctttgcagct cttgtgatct tctcggacag ttcaacctgc ttcagctgga tcctgattgc   240
agaggatgct gtcaggagga agcacaattt gaaaccaaaa gctgtatgc aggagctatt   300
cttgaagttt gtggatgaaa attgggaagg ttccctcaag tccaagcttt tgttaggagt   360
gataaaccca aactgttcag aggactgcaa atcaagtatg tccgtggttc agaccctgta   420
ttaaagcttt tggacgacaa tgggaacatt gctgaagaac tgagcattct caaatggaac   480
acagacagtg tagaagaatt cctgagtgaa aagttggaac gcatataaat cttgcttaaa   540
ttttgtccta tccttttgtt accttatcaa atgaaatatt acagcaccta gaaaataatt   600
tagttttgct tgcttccatt gatcagtctt ttacttgagg cattaaatat ctaattaaat   660
cgtgaaatgg cagtatagtc catgatatct aaggaₜtgg caagcttaac aaaacccatt   720

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ttttataaat gtccatcctc ctgcatttgt tgataccact aacaaaatgc tttgtaacag    780
acttgcggtt aattatgcaa atgatagttt gtgataattg gtccagtttt acgaacaaca    840
gatttctaaa ttagagaggt taacaagaca gatgattact atgcctcatg tgctgtgtgc    900
tctttgaaag gaatgacagc agactacaaa gcaaataaga tatactgagc ctcaacagat    960
tgcctgctcc tcagagtctc tcctattttt gtattaccca gctttctttt taatacaaat   1020
gttatttata gtttacaatg aatgcactgc ataaaaactt tgtagcttca ttattgtaaa   1080
acatattcaa gatcctacag taagagtgaa acattcacaa agatttgcgt taatgaagac   1140
tacacagaaa acctttctag ggatttgtgt ggatcagata catacttggc aaatttttga   1200
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ataaaaagtt tcaaaaatct atctgaattt ggaattcttc tggtttgttc tttcatgttt   1320
aaaaatgatg tttttcaatg cattttttc atgtaagccc ttttttttagc caaaatgtaa    1380
aaatggctgt aatatttaaa acttataaca tcttattgtt ggtaatagtg ctttatattt   1440
gtctgatttt atttttcaaa gttttttcat ttatgaacac attttcattg gtatattatt   1500
taaggaatat ctcttgatat agaattttta tattaaaaat gattttctt tgcttaaaaa    1560
aaa                                                                 1563


<210> 353
<211> 756
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (230)..(230)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (755)..(755)
<223> n equals a,t,g, or c

<400> 353
gaattccaat gtccacaggt gatgggagag atgctgagaa agggtggcca gtgagtgagg     60
aggaaaacca gaggagtgtg tatcctgggt accctgaatg tgatgagcga caagctgtcc    120
cccagcactg tgccattgct tctcccagtt ctcttcaaag tcaccatcct gcttcagcgt    180
gtgtgcccag aagatagccc ttcctcttct gtgcttccag aatccgtagn cagggaatag    240
gaatacatgg acaagtagca tgcagtgcag tgagaatgta taacaacaga tgactctggg    300
gaccaaaatc aaatgggcc agctacaaag agggcaggaa atccccacaggtgatttta c    360
tgtgaggaat tttatgaggt tcagcatcat atattgttag gagaaaatgc tgttttgata    420
agcagagata tgagaaaagt aaacgggaac tatgatttag agatctcatc tgrttacttt    480
gtcctattcy cagtttwatt actaaagagc agtaaagcca aggagaaagt agtaaagatt    540
agatgaatgg ttagcatgtg aaacctgaaa ggaaccagag tgatttccct cgaggaacaa    600
atgcacttct cttacatatg aaagatgatg tgttctgtgt tcccatagaa tctagggaaa    660
gaaaaagtga gcagatactc tgatatgagc aatataactt aggtgtaaaa aaaaaaggaa    720
ttcgatatca agcttatcga taccgtcgac ctcgna                              756


<210> 354
<211> 1402
<212> DNA
<213> Homo sapiens

<400> 354
ccagtgtcgg tctatccaaa aaatgtacta acagatatgt aaaccctgat gaatacagta     60
tgtgttatga gaagtggccc aacgaagcag ctcatccaag tgagattctg aagttgggct    120
ggcgagtaca cgaatggctt tcttactaga gagaagtggg accctgctaa tctgtagcat    180
gtggtggcat catggttact caaatatcac tggaacagaa ggtgaaagaa gaaatctgaa    240
gagaaataaa acaaattttc ggcggttcca agatggccga ataggaacag ctccagtcta    300
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258

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cagctcccag tgtgagagat gcagaagatg ggtgatttct gcattccaa ctgagcaaac    360
ggcacaccag aagattatat cccatgcctg gctgggaggg tcccatgccc acggagcctc    420
gctcattgct agcacagcag tctgagatcc atctgcaagg tggcagtgag gctggggggag   480
gggcacccac cattgctgag gcttgagtag gtaaacgaag cagccaggaa gctcgaactg    540
ggtggagccc accgcagctc aaggaggcct gcctacctct gtagactcca cctctcgggg    600
caggcatag ccaaacaaaa ggcagcagaa acctctgcag acttaaatgt ccctgtctga     660
cagctttgaa gtgagtagtg gatctcccag cacggagttt gagatctgag aacggacaga    720
ctgcccctc aagtgggtcc ctgaccctg agtagccta ctgggaggca ccctccagta       780
ggggcagact gacacctcac acagctgggt accctctga gatgaagctt ccagaggaac      840
aatcaggcag caacatttgc tgttcagcaa tatttgctgt tctgcagcct ctgctgctga    900
tacccaggca aacagggtct gcagtggacc tccagcaaac tccaacgac tggcagctaa      960
gggtcctgac tgttagaaga aaactaacaa acagaaagga catccacacc aaaaccccat    1020
ctgtaagtca ccatcatcaa agaccaaagg tagataaaac cacaaagatg gggaaaaaac    1080
agagcagaaa agctgaaaac tctaaaaatc agagcacctc tcccctcca aaggaacaca     1140
gctcctcgcc agcaacggaa caaagctgga tggaatga ctttgacgag ttgagagaag      1200
aaggcttcag aagatcaaac ttctccaagc taaaggagga agttcgaacc catcgcaaag    1260
aagctaaaaa ccctgaaaaa agattagacg aatggctaac tagaataacc aatatagaga    1320
agtccttaaa tgacctgatg gagctgaaaa acatggcgcg agaactacat gacaaatgca    1380
caagcttatc gataccgtcg ac                                            1402

<210> 355
<211> 2270
<212> DNA
<213> Homo sapiens

<400> 355
ttttttttt aactttttaa acaatccatt ttaatcatct aaattattta caatacaata    60
acatggattc atcctttta agacatggga ttgtaaaaat caacaagtga atgatgcttc     120
aaataataca tttaaataca ttaatcaaat tttttcagtg cttaaaactt tttctccatg    180
ggacagcagg ctctggacaa aagtgcctag catacaagtt ttcccaattt ccttctatca    240
taccagctgc acataaaaag gttcatcacc tcctgtctcc aaagtgtctc cctactgagt    300
gttcccaggc agacaatagt tcctgggata gtgctgtttg gtaacagaaa agcccaagcg    360
tagaggacgg attaaaaggc agggaccaga ccgccatgga tacaaatccc aagacagagg    420
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taattctgta aactcatggc cacaccttta atgcttgggg acagtgggtg gagtcagcca   1800
gagctctttt ccaacttcat ctagggtctt ctctctggaa aagcttagtg acgttctccg   1860
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259

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aaggtttatt tggttaagga gtattgctaa aacacttttt aaaaatccac tttgaacaca   1920
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ctgacgaaat gtctgaaatc ctgagccttt cctggttcta ttttaataca gcgtacaggt   2040
aacagatgat ctcatttacc ttctgaatga cccagcactc aatttcccta aaactgctca   2100
gctccacttg gaaatcacca ggggacttga gaatcttccc cttagactca gggagacacc   2160
cagaccagga agaagggcac tgatgttttc agggacccaa aagcccactt tttttttttt   2220
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<210> 356
<211> 1123
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (213)..(213)
<223> n equals a,t,g, or c

<400> 356
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ctgaaaattg ccaagagaaa gatgtggaag gatgaaatgg aggcaacatg aatttctgtc    180
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ttttggaaac ttcatgctgt ttttagtgtt gatagaaagg aggtatctgc catttctgtc    360
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gatcagctga atcaaccctg gcaatcaatg gggtgacaga tgttgcagcc agatcgccct    720
cacatccagt cctaccttct tggtaacaaa acaattggtt ttgctggtct agaaactgta    780
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tttcactcat ttatttcttg tagctcatta aaagaaaaac cataattgag catctactat    900
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tgctttacta gggaataaac taaatatcaa gagaacaaag ataagcaatt ccttcacgat   1080
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<210> 357
<211> 1417
<212> DNA
<213> Homo sapiens

<400> 357
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gatgggagag gggagagggg agaaaggaga agaggcactg actggagggg ctgaagcttt    360
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tgactgtcct tggaatgtgc cacaggggtg tgacgccccg gccaactcca ggctgccta     660
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<210> 358
<211> 3388
<212> DNA
<213> Homo sapiens

<400> 358
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cagcggcgcc agtgggagcg cgcccagagt cgtcgggcct tccaggagct ggtgctggaa    180
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gccgtggtcc cagggtcacc acacagaatg tatacttcta cgatggcagc    720
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ccgtgggtgc caggcagtgg tgtgagtgga caagcactgg cagtggccc ggatggaaag   2280
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261

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<210> 359
<211> 1965
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (333)..(333)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (1961)..(1961)
<223> n equals a,t,g, or c


<400> 359
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cagcggccgc gccccttcag ctagctcgct cgctcgctct gcttccctgc tgccggctgc     180
gcatggcgtt ggcgttggcg gcgctggcgg cggtcgagcc ggcctgcggc agccggtacc     240
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caccttacag cagcattct gcagagagcg cancatattt tgactacaag gatgagtctg      360
ggtttccaaa gcccccatct tacaatgtag ctacaacact gcccagttat gatgaagcgg     420
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ttaagtagca tgagccatgt ccctgtagtc ggtaggggc agtcttgctt tattcatcct     1200
ccatctcaaa atgaacttgg aattaaatat tgtaagatat gtataatgct ggccatttta    1260
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262

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aagggggtttt ctcaaaagtt aaactttttgt tatgactgtg ttttttgcaca taatccatat   1320
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catagtgcaa aaatacattt aaggtgtggt caaaaataag tctttaattg gtaaataata   1440
agcattaatt ttttatagcc tgtattcaca attctgcggt accttattgt acctaaggga   1500
ttctaaaggt gttgtcactg tataaaacag aaagcactag gatacaaatg aagcttaatt   1560
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa naaaa                   1965


<210> 360
<211> 1382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1339)..(1339)
<223> n equals a,t,g, or c

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ttttcactta atgtattata ttccaccaat atacaaatat ttgtatyatt ttagggcagt    080
tagaatagaa aatacatttt cagtagaatc gttaataaat gaatagaaaa atgagaactc    360
attggtgagg tagagagcaa acacacacta agggagtgac ttgtaattga gcagaaattt    420
cctttgagtt tcctaatagc caaagcaaaa gaaaaaaaaa aaaggaagga aacaaactta    480
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<210> 361
<211> 1755
<212> DNA
<213> Homo sapiens

<400> 361
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cgctgtgtca ccgcggccct catctacttt gctatctcca tcacggccat cgccaagtac      180
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aaaaaaaaaa aaaaa                                                       1755
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<210> 362
<211> 547
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (547)..(547)
<223> n equals a,t,g, or c

<400> 362
```
ncgaaaatga gaaaggtaac aatttcgaaa aagcatgccc ttctgctgtg tttccagttg       60
tttagatgtc tgctctccat .gtatatatgg atcacattcg tgttagatgg aagttgtgaa     120
tccactgttc tctcaaaccg gtctctttcc cttgtaccta tcatagtgta catagctcaa      180
cttcctgagt ttgattctag tgttcaaaga taggtatttt tcatataaga tgtcctgtca     240
aagcaagtca ttgaacttac ctggtatttta actgaaaaca aacaaaaatc agcaatctct     300
tccattgctt gtagaaatac tgacttaggc caggcacagt ggctcacgtc taatcccagc     360
actttgagag gccaaggcag gagtatcact tgagcccagg agttcgagac cagcctggca     420
acatagtgag accttgtctc tgtaaaaagg aaggaaggaa gggaaggagg gaggggtgga     480
gggagaggag gggaggggac actctgttat acttatcgaa aggtgctatc caggtgtggt     540
agtgcan                                                                547
```

<210> 363
```

<211> 1974
<212> DNA
<213> Homo sapiens

<400> 363
```
ggcacgagtt gggagcagct ctgcgtgcgg ggcctcagag aatgaggccg gcgttcgccc   60
tgtgcctcct ctggcaggcg ctctggcccg ggccgggcgg cggcgaacac cccactgcg   120
accgtgctgg ctgctcggcc tcggggggcct gctacagcct gcaccacgct accatgaagc   180
ggcaggcggc cgaggaggcc tgcatcctgc gaggtggggc gctcagcacc gtgcgtgcgg   240
gcgccgagct gcgcgctgtg ctcgcgctcc tgcgggcagg cccagggccc ggaggggggct   300
ccaaagacct gctgttctgg gtcgcactgg agcgcaggcg ttcccactgc accctggaga   360
acgagccttt gcggggtttc tcctggctgt cctccgaccc cggcggtctc gaaagcgaca   420
cgctgcagtg ggtggaggag ccccaacgct cctgcaccgc gcggagatgc gcggtactcc   480
aggccaccgg tggggtcgag cccgcaggct ggaaggagat gcgatgccac ctggcgcca   540
acggctacct gtgcaagtac cagtttgagg tcttgtgtcc tgcgccgcgc cccgggggccg   600
cctctaactt gagctatcgc gcgcccttcc agctgcacag cgccgctctg gacttcagtc   660
cacctgggac cgaggtgagt gcgctctgcc ggggacagct cccgatctca gttacttgca   720
tcgcggacga aatcggcgct cgctgggaca aactctcggg cgatgtgttg tgtccctgcc   780
ccgggaggta cctccgtgct ggcaaatgcg cagagctccc taactgccta gacgacttgg   840
gaggctttgc ctgcgaatgt gctacgggct tcgagctggg gaaggacggc cgctcttgtg   900
tgaccagtgg ggaaggacag ccgacccttg gggggaccgg ggtgcccac aggcgcccgc   960
cggccactgc aaccagcccc gtgccgcaga gaacatggcc aatcaggtc gacgagaagc   1020
tgggagagac accacttgtc cctgaacaag acaattcagt aacatctatt cctgagattc   1080
ctcgatgggg atcacagagc acgatgtcta cccttcaaat gtcccttcaa gccgagtcaa   1140
aggccactat cacccccatca gggagcgtga tttccaagtt taattctacg acttcctctg   1200
ccactcctca ggctttcgac tcctcctctg ccgtggtctt catatttgtg agcacagcag   1260
tagtagtgtt ggtgatcttg accatgacag tactggggct tgtcaagctc tgctttcacg   1320
aaagcccctc ttcccagcca aggaaggagt ctatgggccc gcgggcctg gagagtgatc   1380
ctgagcccgc tgctttgggc tccagttctg cacattgcac aaacaatggg gtgaaagtcg   1440
gggactgtga tctgcgggac agagcagagg gtgccttgct ggcggagtcc cctcttggct   1500
ctagtgatgc atagggaaac aggggacatg ggcactcctg tgaacagttt ttcacttttg   1560
atgaaacggg gaaccaagag gaacttactt gtgtaactga caatttctgc agaaatcccc   1620
cttcctctaa attcccttta ctccactgag gagctaaatc agaactgcac actccttccc   1680
tgatgataga ggaagtggaa gtgcctttag gatggtgata ctgggggacc gggtagtgct   1740
ggggagagat attttcttat gtttattcgg agaattgga gaagtgattg aacttttcaa   1800
gacattggaa acaaatagaa cacaatataa tttacattaa aaaataattt ctaccaaaat   1860
ggaaaggaaa tgttctatgt tgttcaggct aggagtatat tggttcgaaa tcccagggaa   1920
aaaaataaaa ataaaaaatt aaaggattgt tgataaaaaa aaaaaaaaaa aaaa   1974
```

<210> 364
<211> 890
<212> DNA
<213> Homo sapiens

<400> 364
```
aattcggcac gagattcact aaacactgca atacaagctt ggcaacagaa caaatgccct   60
gaggtagagg agttggtctt cagccatttt gtgatctgta atgacacaca ggagacactg   120
cggtttggcc aggtggatac tgatgaaaat attctgcgg cgagtctcca cagtcaccag   180
tacagctggc gctctcacaa atccccacag ctgttacaca tctgtattga aggttggggc   240
aactggcgtt ggtcagagcc tttcagtgtg gaccatgccg ggactttat tagaacaatt   300
cagtacaggg gtcgaactgc ttctctcatc atcaaggttc agcaactcaa tggagtacaa   360
aaacagatta tcatctgtgg aagacagatc atctgtagtt acttgtctca aagcatagaa   420
ctaaaagtcg ttcagcatta cattggtcaa gatggacaag ctgtagttcg gaacattt   480
gactgcctca cagccaaaca gaaattgcct tcgtacatac tagaaaacaa tgaactgacg   540
gagctgtgtg tgaaggccaa aggagatgaa gctggtcaa gagatgtgtg cctggaatcc   600
aaagcccctg agtacagcat tgtcattcag gtgccatctt caaacagttc cattatttat   660
gtctggtgca cagttttgac tttagaaccc aactctcaag tgcaacaacg aatgattgtg   720
```

265

```
ttcagccctc tttttatcat gaggagtcat cttccagacc ccattatcat acatttggag    780
aaaaggagtc tgggattgag tgaaacacaa attattccag gaaaagggca ggaaaaacca    840
ctgcaaaaca tagaacctga ccttgtacat cacctgacat tccaagcaag               890
```

<210> 365
<211> 1043
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (987)..(987)
<223> n equals a,t,g, or c

<400> 365
```
gaagctggag ctccaccgcg gtggcggccg ctctagaact agtggatccc ccgggctgag     60
gaattcggca cgagctttcc cctaagtttt cttatcttca ggctacagaa ttattgagat    120
tactctcaac cattcctcat gttagaaact cttttctcaat ttatttccat cctctttgt    180
cttctctgga taatctcaga tttgatactg tgttttctta aatgtggtaa tcccggaact    240
ctagatatgg ttcttcctat ttggactaat cagtatacac attccagtag atccattttg    300
tcctttatct agatacagta tttctagtag cttgaaactc atttgccttt taaaagttgt    360
tttaggatta aaaatcacaa accaaatatc cactgtcctc aagagaatca cctaacaccc    420
ataaggattc ttgtagactc atggtaaagg ggtagctatt gttttatatc agatagcagg    480
agtagctatt cttttatatc agataaaaca cattaaagca acatgaatag gcatttgtta    540
aaagaagata tacaaatagt caacacatat aaagaaattc tcaacatcac tatgatcag    600
ggaaatacaa attaaaacca cgatgacata caccttatcc cagccagaat ggccattatg    660
aaaaagtaaa aacaaaacaa aaaaaacaga tgttggcgtg gatatggtaa aaagggaatt    720
gcttatacac tgctggtgag aatgtaaatt agtacaagct gtgtggaaaa cagtatggag    780
agttcaagta gatctaccac tttatctggc gttctcacta ctggctatct attaaaagga    840
aaataagtcc ctatgtcaaa aaagacacct acatgtctat gtttattgca gcacaattca    900
caattgcaaa gatatggaac cagcctaagt ccacatttaa ctgatgagtg gataaaggaa    960
atgtgtgtgt atsmtcacca tggttgncaa aaagagaccc gttgcctct gtaaccagac   1020
actcaggctt tccaggagcc cag                                          1043
```

<210> 366
<211> 2103
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2101)..(2102)
<223> n equals a,t,g, or c

<400> 366
```
ttcctcgtag cgagcctagt ggcgggtgtt tgcattgaaa cgtgagcgcg acccgacctt     60
aaagagtggg gagcaaaggg aggacagagc cctttaaaac gaggcgggtg gtgcctgccc    120
ctttaagggc ggggcgtccg gacgactgta tctgagcccc agactgcccc gagtttctgt    180
cgcaggctgc gaggaaaggc ccctaggctg ggtctgggtg ctggcggcg gcggcttcct    240
ccccgctcgt cctccccggg cccagaggca cctcggcttc agtcatgctg agcagagtat    300
ggaagcacct gactacgaat gctatccgtg cgagaacagc tattccacga gaggatccgc    360
gagtgtatta tatcaacact tctgtttgca acactgtaca tcctctgcca catcttcctg    420
acccgcttca agaagcctgc tgagttcacc acagggtgtc ctgggccggg tctmtgagac    480
agtggtgatg ttgatgctcc tcactctgct ggtgctaggt atggtgtggg tggcatcagc    540
cattgtggac aagaacaagg ccaacagaga gtcactctat gactttggg agtactatct    600
cccctacctc tactcatgca tctccttcct tggggttttg ctgctcctgg ctgctggaag    660
acctggagga gcagctgtac tgctcagcct ttgaggaggc agccctgacc cgcaggatct    720
```

```
gtaatcctac ttcctgctgg ctgcctttag acatggagct gctacacaga caggtcctgg       780
ctctgcagac acagagggtc ctgctgggta tgtggcttcg tagggcttgg gatacctggg       840
tttccccaag gagagtagcc cctggttcca ggtgcttgct gacagcctcc catccctgca       900
cagagaagag gcggaaggct tcagcctgkc aacggaacct gggctacccc ctggctatgc       960
tgtgcttgct ggtgctgacg ggcctgtctg tgctcattgt ggccatccac atcctggagc      1020
tgctcatcga tgaggctgcc atgccccgag gcatgcaggg tacctcctta ggccaggtct      1080
ccttctccaa gctgggctcc tttggtgccg tcattcaggt tgtactcatc ttttacctaa      1140
tggtgtcctc agttgtgggc ttctatagct ctccactctt ccggagcctg cggcccagat      1200
ggcacgacac tgccatgacg cagataattg ggaactgtgt ctgtctcctg gtcctaagct      1260
cagcacttcc tgtcttctct cgaaccctgg ggctcactcg ctttgacctg ctgggtgact      1320
ttggacgctt caactggctg ggcaatttct acattgtgtt cctctacaac gcagcctttg      1380
caggcctcac cacactctgt ctggtgaaga ccttcactgc agctgtgcgg gcagagctga      1440
tccgggcctt tgggctggac agactgccgc tgcccgtctc cggtttcccc caggcatcta      1500
ggaagaccca gcaccagtga cctccagctg ggggtgggaa ggaaaaaact ggacactgcc      1560
atctgctgcc taggcctgga gggaagccca aggctacttg gacctcagga cctggaatct      1620
gagagggtgg gtggcagagg ggagcagagc catctgcact attgcataat ctgagcaaga      1680
gtttgggacc aggacctcct gcttttccat acttaactgt ggcctcagca tggggtaggg      1740
ctgggtgact gggtctagcc cctgatccca aatctgttta cacatcaatc tgcctcactg      1800
ctgttctggg ccatccccat agccatgttt acatgatttg atgtgcaata gggtggggta      1860
ggggcaggga aaggactggg ccaggcagg ctcgggagat agattgtctc ccttgcctct      1920
ggcccagcag agcctaagca ctgtgctatc ctggaggggc tttggaccac ctgaaagacc      1980
aaggggatag ggaggaggag gcttcagcca tcagcaataa agttgatccc agggtttgct      2040
ttgttttttt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa       2100
nna                                                                    2103


<210> 367
<211> 456
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (456)..(456)
<223> n equals a,t,g, or c

<400> 367
gaattcggca tgagctttct ttctcctgca ggcattggaa atacagtccc agctggcaac        60
accagccagc agcacagccc ggaatcctgc tcctgacctg caccatcccc accagcccac       120
gatagaacgt ttttgtaggc attcctcctc atgggagagg atagagtaca tgcgagtttt       180
tgctctcctc ccaccctttc acaagagcac tgtgctttct tttcttctt ttttcctttc       240
ttttttttt tttaggcagg gtcttgctgt gtcasccagg ctggaatgca gtggtgcaat       300
catagctcac tgcagccttg acctcctgga ctcaagcaat cctcctgcct taacctccca       360
gctactcagg agaccgagac aggaggacca cttgagccca ggaggttgag ctgcagtga       420
gccgagattg caccactgsa mtccagcctg gggaan                                456


<210> 368
<211> 616
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)..(17)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
```

<222> (580)..(580)
<223> n equals a,t,g, or c

<400> 368
cmgctrctra gcaactnagt gggatscccc gggctgcagg aattcggcac gaggagaacg   60
gctgcacgtg ggagatgctc cgtggatgtt tgtagaacgc tggcttccgt gtttcctcgt   120
tgtggctgtg gtggtgtggg tctttgcctg tggacccgtg aagacaaag aagacagttt   180
tggatggtca agctatttc ttgcttcagg gctccctccc ctgctttttg aagcctcaca   240
aaccaggact gtgagggcag gaaggcttgg ggtctttgtg tgctgagcct cattagggtt   300
ttaagaacct ccctcctttc atctctagct tacgagaggg atgattcatt atcttccctc   360
ctcaggctgc agtagaagca gacagtctct gcctccctgcttgcctttcc tccctcccat   420
tcactgttga ttattgccct caagaataac aggttgccca gctactcgag argcttaagt   480
gggaggattg cttgacccca ggagttcgag gctgcagtga gctatgatcg cttcactgcg   540
ctatagcctg gcagacacag agagaccta tctcaagcan acagacaaac aaaaaaaaa   600
aaaaaaaaaa ctcgag   616

<210> 369
<211> 575
<212> DNA
<213> Homo sapiens

<400> 369
atcctctgga atctaggtgg aagccaccaa gccttcttca cacttgcgtt ctgagcatct   60
gcagacttaa ccccatgtgg caatcaccaa ggcttatggcttgtgtcctc cagaactgtg   120
gccagagctg tacctgggcc cctttgagct gaggctgaag ccagagtctg aagctcagca   180
gggcagtarg gccctgggcc tggcccctga aaccattctt ttctcctaag cctctgggcc   240
tttgatggga rgggctgtcc tcaagatttt tgaaatgcct ttggagggtt tttgccttgt   300
cttggatatt ggcttccttt tagttatgct catctctcta gcaagtgaat gtttcacaac   360
ctgcttggat tctttctcta ccacagarcc aggctgcaaa ttttacaaac ttttacactc   420
tgtttccctt ttaaatataa atttcaatgt taagtcactt ctttgctccc atatctgatt   480
taggttgctg gaagtagcca agtcacctct tgatgcttt gctgcttaga aatttcctct   540
actaggtagc ctgggtcatc acacttaagt tcaaa   575

<210> 370
<211> 1144
<212> DNA
<213> Homo sapiens

<400> 370
gcacacatac gtatgcatat aaggattatc atatataaat ttatataaca atttttatgc   60
atgagtgtga ataaatatat gcatatatat gtctgtatat gtaaacataa tgcatatagt   120
aatttacata tatctgtgtg tatatatgtg tgtggcacag tcacacacac acacacaaat   180
atgtatacag atgcttcctg gcttacaata ggatttcatc ctgataaatt catcgtaaat   240
caaaagtatt gcaagttgaa aatgcatttc atacccagt aagttcatca tttgktcaaa   300
agtattgtaa gtcagaatac atttgacatc tggataagtc cattataaag tcaaaacatt   360
ttaagtctaa tcattgtaat ttgggtaccg tctatgtaga tacgtaaatc atacattaag   420
ggtgactagg tgccaggttg aatgttatga aaatgaattt caagtctcac aggcacattc   840
acccattaca aatatgtacc acattcacct attacaaata tgtacacatg tatgtgttca   540
tgttcatact acaatggcag agttgcataa ttgtgacaga aatcaaatgg cttacaataa   600
ctaaggcatt tctacatagc cttttaaagt aaaaagttta ttcattgttg gtctacataa   660
cgtggaggaa tttgtagcgg acaggctat acagtcagtg aattgaaagg aagggagaag   720
ttgggggaga ctagtagctt tttgaaggta ttatttaga gatttatgaa kttttggaga   780
acaagggatg aggaaaaagt attgaagaat ttgggagagc aggatatcaa ttagtttctg   840
actttattgg gaatgcagat cagagaaagg ctgggataga aaactgaaat aataatta   900
gccttcggtg aatatcagca ggactgatgg gactataggg agggtagact aggtgataga   960
gcccattgtg gcagtttcgg taggacatca ttggtgtata cgtatatgtt atttgtgatt 1020
ttgtttatct tttttaata agcaaaagga aaagtgtcct gatatgtttt ggctttgtga 1080

```
ccccatccga atctcacctt gaattgtaac aaagttttac catgttaaac aggctagtct    1140
cgta                                                                 1144


<210> 371
<211> 703
<212> DNA
<213> Homo sapiens

<400> 371
gcttggttac gtttatagct tcaacacgcc tctcattkta ggtttataca tgtgtttgtc     60
tgctcattta ttttgtcatc atttgctcat tttattacca gttattgagw gcctactgtg    120
taccaggcac tgggcaaggg gcattctgtg agagagggta tggtacctgc gggcttaagt    180
agtccgtggg cttgtgagga aaacgctaga ttagatcttg attactgtaa atgtcaarta    240
tggccaagtg tgggatttcg tggcaggagt gagctttcct ggaatttgtc tttcttgcct    300
caatttgcct gatagtcatt tcatgctagg gatgttttaa agtctctggg gaggccctgc    360
agtgtagagg aaaatgctga tccacaccag aaatgcgaac ctggctctct gcccttgggc    420
aagtcactta accctcctga gcctcagttt ccatctgtca cttagagctg atataccta     480
cttaacaccc aggctttttg tgaggggcat tatctcatta gagataatgt ttttaaaagc    540
tctttgtaaa ttgtgtagca ttcaaatgga agttattgtt atttttatta ttgagtgcct    600
tctaattcaa cactgggata gtaacaaaag aagagagggg ttattatcac ccctcttccc    660
tgtcacgttt agattggggc aaggaaaggt tctcaccctg cga                      703


<210> 372
<211> 1649
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1249)..(1249)
<223> n equals a,t,g, or c

<400> 372
agctccaccg cggtggcggc cgctctagaa ctagtggatc ccccgggctg caggaattcg     60
gcacgaggga tctgtgtggc atggtatgtg tgtttatgtg tattgtgggt gtctgtgtgg    120
catgctgtgc gtgtgtgtat tgtggatgtt tactgtcccg ggcagtagaa aggacgtcgg    180
ggaagcagcc ccagcatcag ggacaggcca ggagtgcaga atgcatggaa gctggtcagg    240
tcggagcctg ggatgaagga agcacagaga tgcaagggtg ccagggccca tggaaccaag    300
agccgatgat caaggccaca gtgcacacag ccctggaggc aaaggacata ttcatttcac    360
aaggattaaa aagcatgggc caaggctggg ccccaggcca ggactgggga tacagagtgg    420
atcagtcccc atccctgccc ccaggtgctt acccacaccc atcacctca caggtttccc    480
cacccccagcc ccttggcgag ctcctcctca ttcctcaaar cgtcgctkag gtcacgctcc    540
ttcccgaggc ctctccccat cctctaaaac accctctccc tgctgcccac ttgcagcaca    600
gtcagagagc tccgtggcct gtttccactg gactgagtct tctgggggggt gctggtgcag    660
agcagarccc tgggctggga gtcccggcac ctcgttccac tccctcaccc acagcctcgc    720
tgtttaacct caggcaggcc gtgtmcctcc tcagcctcac tttcccccttg tgtaaaatga    780
gggaagggac tgcgccttct aagccatctt tcagcttaaa acctctttga ccttctatct    840
ggctaatgga ggtgctgacc aggggcaaga agggattga aaaacgcttt gaaaaattca    900
tagcaggagg caaaggagaa agagtcttta ttttcgtaga gcgggaggca ggaggagtta    960
tggacagagg ctgtcgatga aaaggacagc atctcagagc actttgtggc atttaatgtc   1020
taatgcctcc tcccattaaa gcagtggcat caaatattta ccaaagcagc attaaaaatt   1080
aacctttacc atggggatgt ataaaggccc taagttccct gagaagtgac cgaacatcag   1140
gagggtaaag tgacaggaag gaaggctaca agcgggttgt gaataatgga agcccccaaa   1200
ggtcccccaa cacagctccc tgttgacccc actcccaaag ccagggcanc ctccggccgt   1260
gtctctgcag aggctcccag cccttcggag atcccagag ggcctgcagg ataaggacag   1320
gccctcagct gggcatccac agccttccat ggcctggccc tgcctctctg ggcagctggg   1380
atctgtagga tggaaaggaa tgagtctgtc ggagttggaa gagaccaggg gaggaagtgg   1440
```

269

```
ggagtggtcc gggcactgga aatagcacgt gcagaggcac tgaggcagag acagctgcac  1500
atcaatccat cagaagagca gccaggtggc atgagtgtgg gggaggaagg aagcgcagga  1560
ggggacaggt gggagatgca ggtaggtctg actgtgcagg gccatggtaa gatgtgggct  1620
tctcggtcca gggacagggg tgccctcga                                    1649
```

<210> 373
<211> 639
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (62)..(62)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (126)..(126)
<223> n equals a,t,g, or c

<400> 373
```
tcctttcatc ttaagcacca cccgacaggg caggtactat taccatctcc gtttgacang   60
tnaggaacct ggcacaggaa gcatttaagt ggattcccca ggatcgcccc actgtcagga  120
gcagantcag aatgggcctc agcatcaggc tcccaatcct ggcttctaac tgctgcgctc  180
tgcccttcyc tcwccccacc tccccactcc agtgcctttg gtcatgccac tgcagctttc  240
aggccaatac tggattagcc tdtagtgtt cttgtccctg cagccatttc cccaggcagc   300
aattccatgt gccctcactg atgtaggtgg ctcttgtgtc atttgtcaca tcctattgaa  360
ttgtttatgc atcttgttca cactcacagc accctccctc tcacacgtcc tccttataaa  420
aatgtccctc agtgtctgct atgagccagg tgcagactta agtgacaggg ctgtacggg   480
aaataaaaaa ttaacaagga gcacctgcct cttaatgcac agtaacaaac tatgttaagt  540
gtcaggaagg aaaggttaag gatgccagga aggcttttaa taaataacct gacttagatg  600
ggcaggtggt gctgargatt aagaacgtgt cttctcga                          639
```

<210> 374
<211> 520
<212> DNA
<213> Homo sapiens

<400> 374
```
gagaaggact ttatgcaggg aagtgacgca ggacacggag ggactcatat ttaccgagct   60
ttggtgcagt ggcccctggc ctgggtattc tatttaagcc atgcaaaaac ccattgggga  120
gaagagttaa ggttttcctt ccgcaggaaa aacttgaggc tcagagaggc tatagacat   180
gagacatgcc aggtcacaca gctggtagct ggcaaagctg actccaacct gtgtctgagg  240
gactctgaaa cctggttctg gcccccactc tgggcagcct gctcctctct acaagccact  300
gcctgcagat taagcagtcc tagcaaaggc ctgggagcat ccagagagtg cccctggctg  360
gcgagtggta gagcagccctt ggtttccttc ctttgaccct caaggatcac aggagtgtca  420
cccagaagta acttaactta tgagtgtttt atgaacagga aaagcaggaa aagggggtaaa  480
gtcacatgat ttcacaacca aacagcctgt aaactcgtgc                        520
```

<210> 375
<211> 524
<212> DNA
<213> Homo sapiens

<400> 375
```
gcacagaggg cttgggtgca ggtggtttat ttgggaagtc atcctggaaa atccaaaagg   60
aagggatgga gaagagatag aagacaagaa agaatgcatt gctcgtgggt catgggtata  120
```

270

```
gaaagtttct aggaagcttc tgcagaaccc tatgcaatgt gcctcgaatt gtccaaggaa    180
ttgaatgggg agctggtgca tttgtacact acttctgttg ctcactgatg ggcaacaggg    240
cttttatccc cagcctttcc aggctgcccc ggggagacag cagctatggg gaggcaccaa    300
cccatgggct gtactcattc cagaatcctt cctccctac acgctgacag tcaattattc    360
accaagttgt aacttcgaat tctacttacc taaaatgcgt ttggcataa tctgcatgtc    420
acactcacac tgtccctatc ttggtcgaga cattataatc actctcctga actactgcag    480
cagcttccta gctgaactcc tggctcatct ggtctatatt gctg                     524
```

<210> 376
<211> 1035
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (55)..(55)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (110)..(110)
<223> n equals a,t,g, or c

<400> 376
```
gagcggataa caaatttcac acaggaaaca gctatgacca tgattacgcc caagntcgaa     60
attaaccttc actaaaggga acaaaagctg gagctccacc gcgtggcgn ccgctctaga    120
actagtggat cccccgggct gcaggaattc ggcacgaggt tacctcctct ctttcagaaa    180
aaagtgttta aatttaataa aaaaatacag acttcctctc tctctgacct gtttctgcac    240
ttctaatttt gtcccattgt tatatctcaa ttctgaaaca agtcccaaac cttttttgtac    300
actcaggctt ttattatttta taggtgtctt taatgtggtt tcgctgtttt ttgcttattt    360
ttgtgagcag tgtgactttg acaggtgact ttagaaacat gaagaagcca agcagcctgt    420
gcctctttag acagggcttg atgtctgctt ctgaagttag tggcagcgga agtggagaag    480
gggattgaaa ggtatcttta aattcgraat tatagaagt aaaaactggt agatgtgagg    540
acagtgggga aactaagatc atagtcgcct aaggttctgt taatacttga gttgaccagg    600
ggggctggtt atgacattga tcatgctaaa ggaaaagatg ccaggaatga gctggggcag    660
agtgaattgg gcagccttcc atcttgacag cacaccaaaa tgtataaatt agcaaaagcc    720
catctttccc taatgccact aagctgtcag tttctggaat tatcatcatt attarattca    780
taatggtttt aatraaggtg tcatccaaac tgacactttg aaaataaagt gagatgatgc    840
ctaaattgga ggcttggaat gaccttagaa aactgctcca ggaaacttga gaatgtccca    900
attacttaaa gaactctgag tcagctacat ggtcattcc attcatttgc tttgcattgg    960
agagatttat ttggattgac acaggttcat gcctcccaga aggctccacc taaaccatca   1020
ctctgctttc tcgag                                                    1035
```

<210> 377
<211> 491
<212> DNA
<213> Homo sapiens

<400> 377
```
ggcacgaggc aaaagcttgt gctgttagct ttaaagtgta tttaaaataa atctgaaatc     60
atttaaacag catgaacctt ggtggccaaa tagatcaatg acaaagagga gaaaacctag    120
atacaggttc atttttgcct tatatgcttt gagattagtg tttctattta gagctgtgac    180
taatacagat gcatcacggc tgagagcaaa ggaggtgaa tgtccctatt aattgccacc    240
atggtgcgag gctggaatga gggtgtggcc agctaagagg ggatttgctc ttcttgccct    300
agaagttcct cattgtttcc tgtcctgtct tgtgtccagc tgcttagcac acttcctttt    360
ggtatttaat gctttttata gctggaaccc tgaggttcct cagaaatctg cacatgctta    420
ctagatggtg ctctggattt tctttaaaga taggaagaaa aaggcaaagg caggtctgtg    480
```

271

```
acgcttctta c                                                              491

<210> 378
<211> 1042
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (222)..(222)
<223> n equals a,t,g, or c

<400> 378
gaatcggcac gaggaaatat tactgaattt tcttttatta tcaaatacaa atttagcata       60
tcctatgtaa aatgctgatt gcccttttct gcatattatt tcagatcttg ttttctatac      120
ccacaaggat tttctatata tttctcataa acaagagagt ccacatattt actacttacc      180
ttatgagtga acaaaaaaat cacgattggg ttcgcagaac tncaaagttg caccgtgtgt      240
ggctcattag tggaaaaatg ctgctggttg cagatataaa ggctctgatc aggtggctgt      300
ggggccctaa tccagaatga gcacagttat tttgatcaat ggagtctaac ctagtcctcc      360
cccaaggttc aaaatgtcct ctggtgcttg caattttctt acagtatttt tttctaattg      420
ataccaagct gggactctcc tggtatatca tatttggaaa tgaaaagtga aacaaatgag      480
aattttcctt ttgcgttggt gaatgcatac agtgatttaa gtttgggtgc atttctttca      540
gtctgttgat tgttctagga atcgatgctc acagatcaat gagtcatgtc caattcata       600
aacaactgcc tggggtgagt gtggcctcat aaatgtgaac aaatagtaat ggagtggcaa      660
tcaaacctaa agtgttactg caaatcatgc catgctgaaa gaagaaacat ctcaaaaaga      720
gaataaacat ttttagggtc gggtgtggtg gttcatgcct ataatatcag cactttggga      780
ggccaaggca gaaggattgc ttgaggctag gagttggaga ccagcctgag taacatagtg      840
agaccccagt ccttacaaaa aaaaaaaaaa attaacaaag gattgtggtg catgcctgta      900
gtcttagcta ctcgggaggc tgaggaggga agacaacttt aacccgggag ttcaaggttr      960
cagtgctatg attgcaccat cgcgttccag ccttggtgac agagcaaga tctgtctcaa      1020
aaaaaaaaaa aaaaaactcg aa                                               1042

<210> 379
<211> 1095
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (616)..(616)
<223> n equals a,t,g, or c

<400> 379
gatggtatgt gtgtggtgtg tatagggtga atgtgtggtg tgtgaggtgg gcatggtgtg       60
tgtgaggtgt gtgtggtatg tgtggcatgt gtttggtgtg tatgggaata tactatggat      120
taggacatgt gggttattca aagatctatc cttttgtgct ttgaaatctg aaatgtagaa      180
actgtggcct cactgaggag gagtttttaga atatgcaagg gagagatca ggactggatc      240
ttgtatttgg gtaccacatc cagtcccaga cagcatgcta aggcaaggag ctcataaaag      300
ccccaagctc tagctgttgg ctacttatct cctggagcat caggtgagcg cgttcaggct      360
ggggagtcct gatggctgcc tggttgttac aggatgttac agcttaggcc tggggacata      420
gcccagcacc ctccagargt tgtgtctgtt ctttactctt caggttccct ggaggcagga      480
gaggarctgg cctcatttct ggcaggcacc ccactactgt tattgagcaa tcctccaggc      540
tgcagagatg tcagaggagg accctaatgt ctcckgattt tgattatttt gttctttttc      600
cctaggtgtt ttactngcag ataccttgag taccttgtttgtatattcac tttgaaagca      660
cacatttaaa tgtttataag gaaaaggttc taaagacatc cattgatcca ttcattcatc      720
attcagcaaa tacctgttga atacctgctg tgtgctaggc actgcggtgg gcgagccaga      780
rggctttgtt gctccaagga rcttgcattc tagtattcta gttattttca cgcatctgca      840
```

272

```
ctatctggga cagggaccat tgcgttttgt cgtatataaa gcagcatgtg tctgcactac     900
agtttgtgtc cgtygcagat gggcaaggat tgagtgcaaa aacttctggg ccaaaagggg     960
ttggcttggg tcaggctgct aagtagctga ggtgaaagca tgtgccaccc ctcctgatac    1020
agggatcctt gctgattgtg tgtgacacca gggcttccc atctgtcagc tgggtttgtc    1080
ctcacagtag ctcga                                                     1095
```

<210> 380
<211> 427
<212> DNA
<213> Homo sapiens

<400> 380
```
ggcacgagaa aggagccaca tttcttctcc tttcacctgc atgtcataag gtggtcatgg      60
atatattctt tcatattctt gctaaaatac tcattgctgg aagtaacaca agggtatcaa     120
atttgtataa acaacagtat gatttagttc tctaatataa taatgcaata taacaaaatg     180
agtccattca actgttgtcc attcaactat accttaatat atattatttt attgatgctt     240
atctatgtat acattagttc tgtgcacagt ctagggata gtgatctgtt aaatggataa     300
atgaatgaat ggctgaagtt ttatccttct gaatggatga gtggcctctc tagttcattt     360
tcaagcctcy agggcyatga tacakgtttc ctatttccag atttttcttt atgttctctc     420
tttatttt                                                              427
```

<210> 381
<211> 796
<212> DNA
<213> Homo sapiens

<400> 381
```
ggcacgaggt gacgtgtttc tgcatctgtt gccatgacaa gctccctgct tcacccattg      60
ctgtatcccc agcacctctc tcactgcctg gcaagggaaa gcactcagaa gacgctgaat     120
gaccargtag agtgatgggt tgtacagcac tgttactcct tttccatctc tgtgtcccat     180
gtgaacctta tggcacccat gagaaggagc ttgtaccagg tttatacttt ctagtttaca     240
gatgagaaaa caggatcaga gtggtacaga tattggtcta agtcacagag aaagtgaatt     300
gtaaaagcag aaacagagca caggctgcct gacttctagt ccagtgcttt ttgctcaaat     360
tgcctcttat ttctcaggtt attcttgaaa tggcagatgg ggattctgtt taatgaaaca     420
aaagtgacaa ttctttcttt cttggagaga aggtggagac agggtctcac tctatcacac     480
aggctggagt gcagtggctc aatcatggct cactgcagcc tcaatctcct gggctcaagt     540
gattcttcca ccttagcctc cttgactcac tgggactaca ggtgcacacc accatacctg     600
gctaattttt aaagtttttt gtagagacag ggtctcacta tattgtgcat tctggtcttg     660
aactcctggt cccaagtgat cttcctgcct cggctttcca aagtgctgga attacaggca     720
tcaccccccat gcctagcctg aaaattcttt ctatgtcctt aacatcttct ttcccagtat     780
ttctccatcc actcga                                                     796
```

<210> 382
<211> 527
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (492)..(492)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (494)..(494)
<223> n equals a,t,g, or c

273

<220>
<221> misc_feature
<222> (522)..(522)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (526)..(526)
<223> n equals a,t,g, or c

<400> 382
ggcacgagaa aaattctcaa gacccatgtg aaagtcagag aggggtgtg tggcctggct   60
ggcctgaaga caggtgttct gatgattctg gcaggggccc ccatttgcct ggcactgaaa   120
ttatattagt atctttactg tatgagcacc gtgcccatca gggcaagctg tgactcctgt   180
caccaaacac tcaggaacca ttgctttgg ggcctccagg atggtttcat ttgtaggcat   240
ctgccttctg ttggggtcct ttttttctcc ttctctacag gggacaatat ggcaccaccc   300
agcaaaacct gatgggagtg gacatggact accctcattt gcagtaatca tgggcaagca   360
ggtggtaccc acagtgtact ggagaatgcc ctaccctcgw agggggggtc ccggtaccya   420
attcgcccta tagtgatcgt attacaattc actggccgtc gttacaaac gtcgtgactg   480
ggaaaacctg gngntaccca acttaatcgc cttgcagaaa tncccnt   527

<210> 383
<211> 1037
<212> DNA
<213> Homo sapiens

<400> 383
ggcacgagct cgtgccraat tcggcacgag ggtcatagtc cacagaggta aaagttaaca   60
attctgatgc tcttgtatgt gcataccaga ggctctaggg aagaattccc tctttctttc   120
ttccaccttc ttgtggctgc tggcattctt tggcttgtgg tcacatcact cctatcttga   180
aggccagcat cttcaaatct gtttcttctt cacatagcct tctgtgtgtg cagtgccctc   240
tacctctctc ttataaagac atttgtgatt aaatggaggg ttaggataa tctcgtcaag   300
atccttaact taatcacaac tgcaaaaacc tctttcccaa ataaggtaac attcacaggt   360
tccagggatt aggacctatt atctttggta agtattattc agcctaccac aatagctaaa   420
acaattctga aaaagaagaa taaagtgaga gaaatcagtt tatctgattt cgatacttat   480
tgtatagcta tggtaaataa ggctgcatgg tattaaagaa aggacatata tgaatgaaac   540
agaatagagg acccagaaat agacccacac aaaggagccc aaattatttt taaccaaggt   600
agaagacaat ttattggagg aaagacagcc ttttcaacaa atggtactat aacaattaga   660
tatccatagg caaaaaaaaa aaaagaatc ttgatctag gctcacacct tatataaaat   720
aatattaaac tcatggccag gcacagtgac tcatgcctat aatcccaata cactgggagg   780
ctgaggcaag agtatcactt gaggccaggg gttcaagact agcctgggca acacagtgaa   840
actctatctc tacaaaaaaa ttataaacta gctgggcatg gtggcacatg cctgtagtca   900
caactactca cgaggctgag aagatcactt aagctgagtt gttcaaggtt ctaatgagct   960
acaatcgtgc cactgcactc cagcctaggt gacagacaaa gaccccatct caaaaaaaaa   1020
aaaaaaaaaa actcgta   1037

<210> 384
<211> 828
<212> DNA
<213> Homo sapiens

<400> 384
acgagaacac catgctagtg agttcattcc taacagagga gaacttgcat cttgactaag   60
cattagtgat ctcaaatcct ctgcttatga ttttaaact tctgatcttc agaatatttt   120
tccatgagct agctctggct ttgtgcatct caaaccttgt ttctctccca tggctgtcat   180
acttctggtg ccctgagatg cagaatttat ttctacttga tacacacatt tgggtattga   240
tgtagggtta gtacagcagg taggttgaga atttctggag cctccctccc tccctttgtt   300

274

```
ctgacctttc cttagtcata tcatcctaga aagatcttcc ctggcttcgt ctaaaacatg    360
gcctctcatt tcattctctc cctgacaacc dgatgtagt tttcatttca ggactcatca    420
ccccaacatc ctttcctgtt tacagcccat ctcccctgct agaacacaag ctctgagagg    480
tggaaggcct ctattgtggg ttttggcgaa tccccaatct ctagatggtg tctggcatgt    540
gatagagatt caacaaacac ttcaacaaat aatgaataaa gttaaatttt tcagagtgca    600
atcatgcctc tcccttcctc tgccagggcg gaggctgtgc ctggtttgcg cggcttctgc    660
agctccagct ccttgtactg agtctggaga atgatggagc tcagtccatt ttaatcccat    720
gaacattaaa tgcgtggatg tgtggatgct gggatggatg gatgacgctc ctagcacggc    780
agcttgcagg ggattggcga tttccagtaa ggtgtgctaa gactcgag             828
```

<210> 385
<211> 985
<212> DNA
<213> Homo sapiens

<400> 385
```
gtcggcacga gtaataaaat ctaacacctg cttagagacc attcttgtag tggacacaaa     60
gtgccagcct ctaatactcc ttccttactc ttcatggaaa ccttgaagag tgattaaaaa    120
tagtactgtt tatgtctctg accacagagc cagtcatttt cagcacttaa ctgaaattgc    180
tcatgatagt gtttctaaca atggccacat aagtggcaaa tcccttaaga attttgccct    240
ctcagcaggt ggcaatctgc cacctttatc tgatcatttc tctcctcctt tggcattgta    300
gacaccattt tttcctggtt atgaccctac ttctctttat cttctttgtc gattgctttt    360
ccactccagg gagttctgtg tttgacacac aggaggtgtg ggtagttgtt tactctgtaa    420
ataagttgtt agccgtgcag cactgccaag gaattgcacc aaatgtgtat gcattagcag    480
ttaagaagag cgtgtgcaat gttagtgaat ggagtctggt catttgtcat ccaatgcta    540
tttagcacct gttatgtgac agataacagg ccggcactcg gatcataacc cggagcaaca    600
tagtcagaaa caaacacaat ttctctcctt ggtaagcctg gtctgttggg aggtttgata    660
agtaaaaaga agactgagar gccgggagcg gtgctcasgc ctgtaatccc agtactttgg    720
gaggccgarg tgggtggawc acctgaggtc aggarttcaa gaccagcctg gccaacatga    780
taaaaccccg tctctactaa aaatmcaaaa cctagccarg catggtggca ggcgcctata    840
atcccagcta ctcggggggct gaggcagaag aatcgcttga acccgggagg cagaggttgc    900
agtaagccga gatagcacca tcgcactcca gcctagggga caagagcaag attcatctc    960
aaaaaaaaaa aaaaaaaaac tcgag                                          985
```

<210> 386
<211> 1110
<212> DNA
<213> Homo sapiens

<400> 386
```
gaattcggca cgagcttggt tcggggggga gcaaaatcca gaatctgcta aacaccaatg     60
ctgtcactca gagtttgtgt atctgctgtc tgtggagctc tggaccaggc ttgagggacg    120
cctgggggttt ccacccacat ctggggcaaa ccagacccccc aagtcactga catgtcggtt    180
tttctactaa tcacgttggc tttggcaatt ctgtatataa taagaagtat tgtgttctca    240
cttgcacttk ggcagaacgg ttcactccaa ggctgaatga ctgccacgga ccatcccca    300
gcaggggtcc tggggtttag tggtttgatt ctgagcacct ctamgcamag agcccttag    360
tgggttccct aactggacgg ctaaccctgs tgtggaatct gactkkwtct ggaccgaaga    420
ggacaggctg ctctggagaa atccttgggc cttgtgcctg atgctggctc gggccaccct    480
ggccaccctc ccttcatgcc ccatgggacc aggcagcagc atgggagggg gcagcttcca    540
gaacacccct ctgctagggg ctkctggcct ccctgctggc acggccacat ccatggtctg    600
agtgtgtggt tggaatgttt tatcaacacc agtcctcaca gcttccccag atgagcgaag    660
gggaagggga tggtgtgtgg ggggattgcc tcccttgagg cccccagct cccaggatac    720
ttgctggcgg agctctgcct gcggtggagg ccctatgact tgacctccat cttctccctg    780
ggccctcgc tggccctcac tggcagggge tcctgcacgc ctgcaaggcc agagcctccc    840
gccaggtgca ggagaagtaa atgcaggcca gagataaatc gtatttccct ctaactcgga    900
tgtggagtga gaggaaggaa gcaggagtgg agctgagtgt tagtgagagg tggctgagaa    960
ggcggggtcc cgcttcttgc ttccttgggc atttgctgta ggtgctgggt ttcagcctgg   1020
```

aagggtgcag cctctgcact aagtctggtt tggtgaacgt tcatggcccc caatataaac   1080
agtgttctgg gcgttctttg tgactctcga   1110

<210> 387
<211> 925
<212> DNA
<213> Homo sapiens

<400> 387
ggaaatagta ggaaagtgga gcctccagaa ccaagagaga caggagtggg aggcaggctc   60
cagcacgtac acatggaaga gaggtatgaa ctctcattgc catgggcaga gccacccaga   120
ccactgctga gcattctggg aagctcccag ggccctatca gtgcatggca tggaagctgg   180
aatcacttta tttgaatagt gaagtctaca caacctctg aagtctgaag acgagaatcc   240
ttcaaggtga caggccttgg cccatccctg aaccctttcc ctcatcctcc caacagtcct   300
tccccaatgc ctcattttct tctacttgta gcaaaaacca ttctkatcaa ctcagaaatg   360
aacatgtctc cagagtatag ccaaacatgt ctccagaata cagccattca acatccagta   420
atcaaggaga aggatatgca gccttgggct ggcttgtgcc ctctgcttgt tttgtggata   480
tctggtcatc tccattgtat atcagcactg ctgcaggaga gaggtgtggg agtgtcatta   540
tcttctagat cagatgcctg taaagctgca cacagaattg ggaccagctc cagctaaaca   600
gtgggttgta gcatctactg aggattgcaa attaggacaa atcattatct tctccctctt   660
tctctcttcc tcagctcttt ctcaatcttt actacctttt tacacacaca cacacacaca   720
cacacacaaa cacacacact tagactagaa gagtcattta acatgagaac atgaacatct   780
agagatatgg tttggctata tcccccaccca aatctcatct tgaattgtag ctccaataat   840
tcccatatat tgtaggaggg acttggtggg agataattga ataataaggg cagtttccca   900·
catgtgttct catggtagtg aataa   952

<210> 388
<211> 956
<212> DNA
<213> Homo sapiens

<400> 388
gggctgcagg aattcggcac gagcagagac ccccacccc cagctgtcct gatgccccaa   60
gccaaaacat aattcctggc agctcccca ctcccctcc ccctcactct tctgccaccc   120
agagcttggc ccgcctccaa cagcccatgt tctattctg cagtttccag aagcccaccc   180
tcaaacccag gtcacttccc cagcccctcc agcttctagt ccccgggtcg tgcccatcct   240
caccttcctg ggctgaaaca ccacattagg cacccagatg cctctgcatc tgaaaatctc   300
acaagcctgg atgtccctga cgccacccac tccggttctc tttctctttc tcagcctcct   306
gtgggctcgg ttttttctgt ccaggcttaa atgcccaggt ggctgtctct gctggccctt   420
acttctctca cggggatcct cagcggcacc ctgggcttca gtccccatgg atggagcagc   480
ccacgccgcc atctcagccc caggcctgag tgtccagctg cttcccagac aacttgcaag   540
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ttctttttctt ttttttttttt tttttttgaga cagggtttcg ctctgtcttc caggctggag   780
tacagtggtg cgatcttggc tcactgcctc ccaggttcaa aaaattctca tgcctcagcc   840
ttccaagtag ctgggactac aggcacgcgc taccacaccc agttacattt ttttgtgtat   900
ttttagtaga gatggctttt gccatgttgg ccatggctgg tctcaaactc ctggcc   956

<210> 389
<211> 742
<212> DNA
<213> Homo sapiens

<400> 389
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276

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aggtgattgc aaaggtacca gatttgccaa atatacgctt gcaattaaat ccaaaggcct    180
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caattttttcc acttcatttta ttaaaataaa gctctttaac ttgcacgctt ttagacaaaa    300
gcaacagtac tctgaaatga ccccatcact tctcagtgag aagctgtgct ccctgttctt    360
tgtgcttctt gggattgcaa gtgcggcctt tgtgagtgct ctgtgggcct ggagcagcca    420
cacggaaagg ctcacagctg aacccagcag tagcatcacc tgcctttccc caccctggtt    480
ttttttccct ttctaatttg gggtcctctt atagctcctc aaatacaatg tactcgtgtc    540
cctcagagcc actgcacaga ctgtcccctc tccctaaaga gaccccgctc ttactctccc    600
cctcccctac ccmacccagt cagccagctg aactctggtt catcttctgc atccgggtga    660
aaggtcacct tccttgccag tcaaccccca ccctcccact gcagtcatca gagatgagca    720
gcctctaaaa cctgccctcg ag                                            742
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<210> 390
<211> 1298
<212> DNA
<213> Homo sapiens

<400> 390
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cacagagtgg cacccagcca gcgtgaatgc ataagaatct gcacgtgaca cagaagaaag    120
tctcttcatg aagtaggttt cactggtccc agccaaaccc tgtggcatgt ggcctttct     180
gcacctgctg aacatgccat tcaccttgac ccaggtagtg gcctcaccct cctcttgctc    240
aaactggaaa cctcagcatc ctgaaatgcc tcctccccaa atccattgca cacatgtgtg    300
cctgtgtatg cgtgtgtgtg cacgtgtatg aacccagccc ccagctgccc actccattgc    360
ccctaaacag gcccctcctt ggtgtcacct ggcacatctc cactggaagc caaatggata    420
tttctaaact gaaatctggt cccacctcag aacccCttcc acagttccct taaagttcct    480
ttcctcattt acatcaggat cttcacaatg gggacccctg gtcacctccc aacccaacaa    540
acgctccaaa tgagccgcca ctgcagaaac tcattatggc ccgggcagga ctggcacatc    600
caagtatctg accaggctgt tccatctgcc aggcaggtcc tgccctctct ccacccacct    660
gtctaacccc tgcatcctca agaccctact tagctatggc cctgtgtgaa aggtccctcc    720
ccatgtaccc acagccattt gttctctctc atgtggccct aacaggctgg ggttcctgga    780
gactccatgg ggagccaggc atgaagatgg catatcccca tgtgtcactc cccagaacgt    840
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tcacacgggt ggattggggg gctgtgtcac gggatcttag gatcttcaag acaaagaccc   1260
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<210> 391
<211> 905
<212> DNA
<213> Homo sapiens

<400> 391
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aactgatcta gtttatcact ctcttatctc tacaatttat ctttcactca aagaactaaa    120
gttatcttcc aaaaacacag aatgaatcag ctcactctcc tcaagactct aaatggtcc     180
ttcattactt gttgagaaaa gcccagactt gtttagtgga gcaattaaac tccccacaat    240
ttatctgcca gaagactttc tggaaccatg tatggttttt ttgccctcca acttacagtc    300
ttattggtcc attatttttt tctcatcatg ccacacattt ttgtgtcagg taattttagt    360
cttttggcct tgttcttact atcagccaac ttcatagttg aagtccagag ttggttgttg    420
ttgttgttgt tttttatcka tttaggtagg agttacatt tttatttgct ttgtgacagc    480
attattttct gacacatttt cttcatattc ttttaaagag tttcttttttt aaacccatgt    540
tattcaaggt taaacaaata acgagtttct ttgtttggat gttatgctta cacttacttg    600
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aatatgttgt ttttttttcca gactagccat tagcaagatt cctgtggagt gagggagtgc      660
ccagggtagt tctccagatt attctgctca aattcttcct cttctcatgc tgcagtgatg      720
aattatttct tcaaaactat gaccccactg tgtagctcca cctttccttg ttctcacaag      780
agtgtacaaa atcgttgagt cttctgagcc atggctaaca agaatcctag ctactgcctt      840
ccactatatc tttccctttt taaaaggagc atttctgag tttagtcatc tcaggccttc      900
ctcga                                                                   905


<210> 392
<211> 762
<212> DNA
<213> Homo sapiens

<400> 392
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tgacgtgcaa aggctatttc ttgaatttta ttaaaatgca aaaagatgca tccatgtctt      120
ctctaaaagg actgcgtatt cctccacact tggggaaatg cagcttgtgc tatttcacag      180
gctcatcatg ccccttttt ttgccaggac gctggttgat taatgccatg cttggggagt      240
gctccagcca gaaatgaggg ctatcgcctg tggccaataa cagagcagat tctcaataaa      300
catccccttg gtgttacact taatggggct tgcttttcca aactgctccc tttcctgggc      360
tctgagcagc tgagccgaga gctcgtaagc tctgctgccc cagaacattg tgcattcytt      420
gattttgaaa artctttcct gaagsctcct cttgggtcat tggatcagcc caagagcaaa      480
ggatttaaaa gggccaattt gatagggaca gctcatagcc ctgtgtaaga ccactgggca      540
tttttcctgt ttggggaaat ggttactgga ttagcatttt gctgtacagg gcggtctgca      600
agaatgtgtg ctcttgcctg tcctcaaagc aggcttgtga ggagctttct gttcccagcc      660
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<210> 393
<211> 725
<212> DNA
<213> Homo sapiens

<400> 393
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gtatattctc actactttac aggctaaaaa tctgaggcac agaaaagtta ctgaagctcc      120
aaggtcacac tgtgtaccat aagtggaaga gctaggatgc aaacccaggc agccgggttc      180
cagagcagtg ttctaactac taccctctgt tgcctctcat tcatcccatg accttctttt      240
gtcttaccta cactgggatg tgtttggac atgcattttg cttgttgcta tctcattctt      300
gcagaatgca ttgtacttgc tatttgtgtc tattcacagt tcaggttttg ccaggcaagt      360
acaatgaagg aggagagggg caaaggaatt gagggtgcct acaagggagt agttagagag      420
atggatgtga aatctaagct gggcaaattg agaagtaagg acatgatata ggtgatggc      480
agtaaaaata tgtaatgtca gcagtttaaa ggactggatg gggcagatat taattggagt      540
tgcaggacta aaggagttca aaatatagga aatgaatacc agagacagag agagggctga      600
agtcaaaatg ttggaggtgg tacttattat taacaacaag gtctagagga tgaccgcaga      660
attggggtcc aaggtgacac atggctgaca gctgtcattg accacactgt aatgcagaac      720
tcgta                                                                   725


<210> 394
<211> 606
<212> DNA
<213> Homo sapiens

<400> 394
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ttgtcttatc tttttctatg ggaatatttg ctttttattc acttataaga gcaatgcatg      180
tatcaaggtt agatttttaat tttgcaacat attttgtggc ataatcaggt ttaaaatgct      240
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278

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tgaagttacc atatatgtaa attttttctt catgttcttt gcatttaagt gactggaaga    300
gttcattcct tccactgaaa tcactgaata actaccttgg ctacttggtg ccaatgatga    360
aggcatcata tttataccct tcaaaggatt cacagtccag gaagaagcag acaaacgaag    420
actttcataa gtgctatgga gagccaagga accatctcga tctgctggga atcctgggg     480
caggaaactg aggatgggac tgtggtccaa ggaggcagac tctgaccagg ctgggacagg    540
gaaggggagc gttcaggtca aggtggtcgg ccttctgtca gagcatactg cattacagta    600
ctcgta                                                              606


<210> 395
<211> 793
<212> DNA
<213> Homo sapiens

<400> 395
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gaagagtggc gtgttctgat ttaaggttta aaaagaacac ttggcttttt agttgagaa     180
agtattgaag tgggaagccc agttaggagt ttttgcagca agaggtaagg atggtggtag    240
ttagatggag aggccaggga agcttcagag tctgtgtgtg tgtgagtgtg cgtatgtgtg    300
tgcgtgtgta taaggaacag ctaaacaact tgctgttgga gtgggtgcta ctgagagcta    360
agtactgcta gctgctgcag aggccgtgta gagcagaaca gagctgatct ttgccttcac    420
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atttgacttt aagatttgtg gagctcgggg gtgttgargg ggatgcagcw aaaaacagag    540
tctgttaata acccttgttt tatattgctt aataacctgt agtcttgtt  agtgggtcaa    600
aggagaggca gcagcagatg atctttaagg tacctgtctt tgagttagaa awacatagct    660
tgaggaagtt atgtagcttc cctacagatt acagctaata gtagaaccag acttttaggt    720
gagctcatgc acacatcaag tcttagcaca ctgcctagta tatgtctaga gctcaataaa    780
tggtactcgt gcc                                                      793


<210> 396
<211> 426
<212> DNA
<213> Homo sapiens

<400> 396
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aggagcccaa gtagcataga ccctgctgat ccggggccat tgagcagag gatttgggct     120
gaatgtcccc agagacaaaa gggaaaggta gatcctttcc cttaaagatg aaagccatcg    180
cccgggcttg cttattgctc tctctcctgg tccttccaca tgttgtttct gaacatttgt    240
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cttgcagtgt ctccgcgtcg acctggcacc tgggtgaarg cttgctcttg ctggtgccca    360
tagcccccag tgtatggtct tgamctcccc agccatatgg aracccacct caggagggcc    420
cctcga                                                              426


<210> 397
<211> 843
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (486)..(486)
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (489)..(489)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (492)..(493)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (529)..(529)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (572)..(572)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (681)..(681)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (731)..(731)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (771)..(771)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (788)..(788)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (797)..(797)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (809)..(809)
<223> n equals a,t,g, or c

<400> 397
ncgaatatgt gtagctcagc tgttttgaaa atgatctgtt tgtagaaggc cacaaagcaa   60
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atatataata aaagtgcatt atcatatagt gtcacaatga gggattcagg tgcgaaggga   180
agactcattc ctgtgaaaac atagcccatc cccagcagtt ggtagaagga tttgctggag   240

280

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ttcctcctct ttgtgtggcc tataaaacat tccatgaggc atgtggcaat agtcacaatg        300
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acatacttta tgtttgggaa gaggtgctct aggtgggaca ccctgcctgc tccaaataat        420
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gcacgnagna annaggggtt tggggccagt gtcgtttgga tgattttgna cagatcttcc        540
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ggaaactcaa ctttcccatg naaggtaaga ttcccccact gtgtcctttt tcttttttccc        720
tgagaaattg naccaatttc ctgcagtcag atgcaaaaaa tcacaggtgg nctgggtcgc        780
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cat                                                                      843
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<210> 398
<211> 2642
<212> DNA
<213> Homo sapiens

<400> 398
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ccctacctaa atcaaacact gcctactcaa gcctgcctat aaaatccaga gaactccacc        180
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gagagaacgg ttctcctttc tctttctttt gcctattaac gtcctctcct aaattcctca        300
tgtgtgtccg tgtcctaaat ttttttggcg ctagacgacg aagcccgggc acttacccca       360
gacaacacca ccacttcaat agaatgtaca ggccccgcaa tcccaatctt ccccaggatg        420
tagaaaccca gagcagagtg ctttgggggt cccctggcgg tggtaggatg tagggcatgc        480
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ctggaaccac acttttgat tctcagtgta gagctcatta gtgctgcctg ggttacttcc      1020
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gattcatctg atttttaatgg aacccttggg gattgactca atgcagctga ctggtttttt      1680
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taaagttttg atttctaatt tctcgatttg ggcatacgac caccactagc aaatgtcatc      1860
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caggcacca ttagtttact tccccaaagc tgatttcagc attttagcag atgttttgtg      2280
aatgttgtaa atgggtacaa aatggaggac atcctaatgt tgagagtagt aaatatcatt      2340
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281
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gtcatgagcc taaggcttct ctatacacat tagaagaaag tactctctaa agagaatggt   2400
tagaagttaa cagggaatac atcactattg taataatcat aaaaaagcaa ttgcacgcca   2460
gtgttagaca gtctctgggt aaccaggtgc taataatttt actatattaa tgaagacttc   2520
aagtcatact ggtctactca tttggacagt atttgcttca gcactaggaa ggctgatgtc   2580
ttcctttaa actcgagggg ggggcccggt acccaattcg ccctatcagt gagtcgtatt   2604
ac                                                                  2642


<210> 399
<211> 699
<212> DNA
<213> Homo sapiens


<400> 399
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tttcctaagc acactggacc atagaggaag accaaaggaa tgtacagttg cctgctcctt    180
cctgacttgc tgtatttgac tctgtcccca ctggtggtgg caatgctatt aaccccacac    240
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cctctgggca gtcagtgccc agatacttgc cccaattctt tgtgtccaag ccacactcag    540
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<210> 400
<211> 1681
<212> DNA
<213> Homo sapiens


<400> 400
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tgtagcatca gggggatgga ttttgtggcc actgaggaga ttgggtggtg cccatacgag    180
taaggatmca aataaaaatg gmcacsytgt gcattgcttg gtcattacca atgagcctct    240
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cagtagcgct tggcagctga aatcttttct atttagaata tcccaccttt ctatcttgaa    420
attttgtcca agctaaatgc ctcctactaa tctctgcgta cctgcgggaa cacaatgtgg    480
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atggccaatc tgtgctaggt ttgctggtca gaaagtagga tgatatgagc tgatatagsa    660
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aagcttcttt agtcatttgt gtttctttac attacaggcc agaggtgtat cttctctgat   1020
agataatggc cctcagttaa gactagggaa agctattttg cttgctgtat tagcgcccta   1080
ttttagaata atcctattcc cttgattctt tagtatttac aattttctta agtaccgatt   1140
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tggagtagtc agtcttacat atttgaacaa taccaccctg gtgtaatttt aaaaagtaag   1260
agcttgattc tttaaaaaac acttagccag gcagtgtgag ctctctctga ggatcctcac   1320
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cctccgagct gagagctgga cctgatgaat tgtgacaaat gggcctgttt ctgccagctg   1440
cacgttctca gccaggtgac gtctgaggct gcctgccagt aatggtttgt ggtttgggga   1500
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282

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gcaagaggga ggccctggac atactcactg gtgggggaaca ggaaaaagtc aggcccaatc    1560
agaaatagta actctcctca gtgttcccca gctaagtaag acatgcatt taccatacag     1620
tccccatcct aaaactcatg aaatgaagaa ttagtgacac actgggggag tagtggctcg     1680
a                                                                     1681


<210> 401
<211> 607
<212> DNA
<213> Homo sapiens

<400> 401
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gtaactagcc tctggtcctt tttgagagtt cacagtttgg tgcaaaccct ttggatgtat    180
tatttgggaa aatgggatat ctggcagcct gtgtccctgc ttacattat cctttttgct     240
gcctgcccca gcctcctcat tagcatccct gccaaggcca gtggagaagg atggagatgc    300
ggtgacattc agctgacagt tgtcacagat tgataatagc taacagcaca tctctccccc    360
ggctccttcc ctagtgcacc aattagccca gcctcatctg cacctgggac tcaagttgcc    420
taaacatatt tcatttccca tagcagaaga tgccatccat ctagagtgag actgaaaata    480
caaacaattc agaagttgtg actttccatg ctctgcacac agaggctacc aaatgctaag    540
ggcgcttcct ccccagcacc aggcttatgg ttctaagctc cagaaaaata tcaaataaac    600
cctgccc                                                               607


<210> 402
<211> 1355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1327)..(1327)
<223> n equals a,t,g, or c

<400> 402
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catttccctt ctgtgtcctc tttcgtgatc ttgaggtggg acttgggttt gaaggctttg    180
tcactcacct ggcatgcaaa ctcttttgtt attgtgaact ctctgacagt gctttaagtc    240
tggggcacga ataaataatt ttccacacag ctcacaactg tagggcttac atccagtgtg    300
tgtgcgttat gtctgtgtgt gtatccttat tttttttgaga cggagtctcc ctctgtcacc    360
caggctggag tgcagtggcg cgatctcggc tcactgcaac ctccgcctcc tgggttcaaa    420
cgattctcct gcctcagcct cccgagtagc tgggattaca ggcacccacc amcacgcctg    480
gctaatttтt gtatttttag tagagatggg gtttctccat gttggtcagg ctggtctcga    540
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cacaccacac ccggtcctgt gtatgttttg agacggagtc tcactctgtc accaggctg     660
aagtgcagtg gcaggatctc ttctcactgc aacctccacc tcctgggctc aagtgattct    720
cctgcctcag cctcccaagt agctggtatt tcagacttgc accatgatgc ctggctactt    780
tttatatttt tagtagagac ggagtttcac cagcctggtc tcgaactcct gacctcaagt    840
gatccaccca ccttggcctc ccaaagtact gggattacag acatgagcca tcacgcgcgg    900
cccctaagtg gattttagg cattctttca ggtgggcctc tgtggtgaaa ccttttgtgc     960
acatttcaca aacggcttct ccgctgtgtg gcatttctca gctttctcca ctgccttcac   1020
aggaaacttc ttcccgcact cctggccgac gtcgctccct aggtgactgt gcggcaaaag   1080
ctcagacctc aggacactgg tggctgttgt ccagcctagt gtctgcttac cccgcactca   1140
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ttctgaactt tcttgctctt tcagaattgc gttttgaccc tgagtgtggt cgtgggtgac   1260
tcgccggcct cccgccccgg ggtgtggtgc ctttgttctg agtcatcaca gtgccatca    1320
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283

<210> 403
<211> 802
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (23)..(23)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (40)..(40)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (56)..(56)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (59)..(59)
<223> n equals a,t,g, or c

<400> 403
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cgctgaccaa ggtgggtccc tgtctgctgc acaaccacaa acctacctct gaccccagc    180
cccaagcctt gtcactctgg cacagactgg tcccagtgtc aggcagacct ctgagcctgg   240
tcacagactg accccttcct tctggataca ggctgatctt tgtcacaggc cacagacctc   300
tggacctctg gtcccagcca taagtggact gacctctctt tatggctgta tccctgctgt   360
tctggatgct cctggggggca gtgcctatag ctcagggtca tcctgagatt cagctcctgg   420
agtctgagag ttgtggccac agcgcagagg gtccttggcg gggggcctg  cgctgtccgc   480
tgcagcctgg gctctgagca gtgctatccc tagaccttac tcaggggatc ctctgaactc   540
tggccctgcc ctgcagcttg agctattttt gcacagcttt gcggtgcatg gcttttaaat   600
ggctccataa gcagcaggct ttctgcggtg attttttttt ccatctcaca ccgtatcccc   660
tccttgtctc ccctcccctg tctccgaggg tccatctctc tgggtctctt cttgtctctc   720
ctcacctcct cccgaccttt ctgcccttcc tcatctcttg gggcctgacc ctgcaggctg   780
aggctggccg catggagctc ga                                           802
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<210> 404
<211> 940
<212> DNA
<213> Homo sapiens

<400> 404
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acacaattat tgaacagatc tgagaaaaat ttcacaattt tctcagtcct taattgcttt   120
aatatttaaa tcctggcctt ctggaaagtc tcaggtggtg aaatcaaaat tcatattaaa   180
atgcaaatgg gcaattaaat aattgargtt atttaaataa tgtatattct ttattttcat   240
acctgcttga atatatattg taaaggcgag ttaatttatg ctaaaaaatt atgagacttc   300
tgaaaaatgt tctcactcaa atgttaatca tttctttctc cacctgttct tgtttgttta   360
gtttgttttg tgctgtgata acagaatgcc tgaaactagg taatttatat tgaaaagaga   420
tttatttctc atacttctgg aggctaagaa atccaaagtc aggggtta  tattgagcca   480
gggtcttctt gctgtgtcat ctatggcaca aggcagaagg acaacagaac atgccagaga   540
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cagagagaga  cagaggccaa  gcccatcttc  ttatcaggaa  cctattccca  taacagcatt      600
cattcattca  caagggcaga  actataatgt  cctagtcatc  tgttagagat  cccacctccc      660
acactgttgc  attgggggact  gtgtttccaa  cacatgaact  ttgggggaca  cgtccaaacc      720
atagcagacc  ctaaatttaa  acacaggata  ataataaaca  gtttctgtga  cagttctcac      780
actgagggaa  acaaaaacaa  acaaacaaaa  aacaattagg  actgattcac  tgctgttttt      840
cccttctta   tagtgaaaag  aaattcagaa  gctaaagaag  ttcttagtaa  attaattctt      900
aaaatgctta  caatgtaagt  gtattaaaga  ccattttaag                              940


<210> 405
<211> 1365
<212> DNA
<213> Homo sapiens

<400> 405
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tccgggtgat  ggcggccggg  tgccccggat  gtagccctgg  cgcaagatct  cttctttttt      120
ccacctcgcc  ttccgcggat  tcccagcttg  agaaacacct  ctttgccccg  tcatgccaaa      180
gaggaaagtg  accttccaag  gcgtgggaga  tgaggaggat  gaggatgaaa  tcattgtccc      240
caagaagaag  ctggtggacc  ctgtggctgg  gtcagggggt  cctgggagcc  gctttaaagg      300
caaacactct  ttggatagcg  atgaggagga  ggatgatgat  gatggggggt  ccagcaaata      360
tgacatcttg  gcctcagagg  atgtagaagg  tcaggaggca  gccacactcc  ccagcgaggg      420
gggtgttcgg  atcacaccct  ttaacctgca  ggaggagatg  gaggaaggcc  actttgatgc      480
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ggaggacagc  ttgggccaga  cctcaatgag  tgcccaagcc  ctcttggagg  gacttttgga      660
gctcctattg  cctagagaga  cagtggctgg  ggcactgagg  cgtctggggg  cccgaggagg      720
aggcaaaggg  agaaaggggc  ctgggcaacc  cagttcccct  cagcgcctgg  accggctctc      780
cgggttggcc  gaccagatgg  tggcccgggg  caaccttggt  gtgtaccagg  aaacaggga      840
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aacccctacc  cagagaggag  aagcagagtc  gcggggagat  ggtctggtgg  atgtgatgtg     1020
ggaatataag  tgggagaaca  cgggggatgc  cgagctgtat  gggcccttca  ccagcgccca     1080
gatgcagacc  tgggtgagtg  aaggctactt  cccggacggt  gtttattgcc  ggaagctgga     1140
cccccctggt  ggtcagttct  acaactccaa  acgcattgac  tttgacctct  acacctgagc     1200
ctgctggggg  cccagtttgg  tgggcccttc  tttcctggac  tttgtggaggaggcaccaag     1260
tgtctcaggc  agcgaggaaa  ttggaggcca  tttttcagtc  aatttccctt  tcccaataaa     1320
agcctttagt  tgtgtaaaaa  aaaaaaaaa   aaaaagggcg  gccgc                      1365


<210> 406
<211> 2163
<212> DNA
<213> Homo sapiens

<400> 406
cgcccacgcg  tccgaggcgg  cggagcccca  gccccaccca  gtgcggagcg  cgccgcgagc       60
cccgccgyaa  gctgagcgcc  tccgcccgcc  aggcgcgccg  gcgccgggcc  atgtactcgg      120
ggaaccgcag  cggcggccac  ggctactggg  acggcggcgg  ggccgcgggc  gctgaggggc      180
cggcgccggc  ggggacactg  agcccgcgc   ccctcttcag  ccccggcacctacgagcgcc      240
tggcgctgct  gctggggtcc  attgggtcgg  tgggcgtcgg  caacaacctg  ctggtgctcg      300
tcctctacta  caagttccaa  cggctccgca  ctcccactca  cctcctcctg  gtcaacatca      360
gcctcagcga  cctgctggtg  tccctcttcg  gggtcacctt  taccttcgtg  tcctgcctga      420
ggaacggctg  ggtgtgggac  accgtgggct  gcgtgtggga  cgggtttagc  ggcagcctct      480
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actcactggc  gtgggcagga  gcacctctcc  tgggatggaa  cagtacatc   ctggacgtac      660
acggactagg  ctgcactgtg  gactggaaat  ccaaggatgc  caacgattcc  tcctttgtgc      720
ttttcttatt  tcttggctgc  ctggtggtgc  ccctgggtgt  catagcccat  tgctatggcc      780


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atattctata ttccattcga atgcttcgtt gtgtggaaga tcttcagaca attcaagtga      840
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tcctggtctg ttggatgcct tatatcgtga tctgcttctt ggtggttaat ggtcatggtc      960
acctggtcac tccaacaata tctattgttt cgtacctctt tgctaaatcg aacactgtat     1020
acaatccagt gatttatgtc ttcatgatca gaaagtttg aagatccctt ttgcagcttc     1080
tgtgcctccg actgctgagg tgccagaggc ctgctaaaga cctaccagca gctggaagtg     1140
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tgactttcaa ctcttcttcc atcattttta tcatcaccag tgatgaatca ctgtcagttg     1260
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ataagaagtg tctggaatac ccgttctatg taatatcaac agaaccttgt ggtccagcag     1440
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caaactccca tatatttgct tcccccaaat tgctgcccct acagactcaa agctctttt      1980
ctttgttttg ttgtttctct aaaaatttac tgttctttgt cgatgctata taagccaggg     2040
agttctaaga cgccagctct ttgagatttg ctcattcccc tgtatttccc acatatatta     2100
tacatatacc cgctaataaa tttatgtttg ttttaaaaaa aaaaaaaaa aactcgaggg     2160
ggg                                                                  2163


<210> 407
<211> 1979
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (968)..(968)
<223> n equals a,t,g, or c

<400> 407
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atcccacgca ggactggctt cggccgccgg ggccagcagc ttgcracgtg tcccgggga      180
ggcggaatcg ctgtgcgccc tgagcccggg ctcagccctt cgctttccag ctgcgtcctg      240
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ttggctggct gcgctggggc ccggcgggcg cccagcagtc cggagagtac tgccacggct      360
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ccaggctgga gcagggcggc tgcaccaacg accgccgcga actggagcac ccaggcatca      540
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ttccagktga cacgcccagg ccatgaatyc acaactcagt cagatggcag acaggtggag      960
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cagaaaggct aaaccagaga actgtttctg gttttgcaaa catgtgatca ttacatttca     1140
atctatgcta cttttattca aaatatgcag cagtttgact ttaaagttgc aaactggcta     1200
aaaacgtttt actggacatt cagctatatt gcttagaaaa gggctacatg tttctttttc     1260
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286

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atataagttg ttcattgagt tatgatagga atatattcat aaataagcaa agaaaaatac   1320
ctaattgtaa ttatcaaagg ttcacttaaa aaattaacta ttaggtaaac ttaaggggc   1380
agtgaaaaat ctatttatga tttcgggagt aacctaaca tgaataatat tagcatwatg   1440
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tacaaggtty caataatcac atgaggagtt taaagtttta aatatatact cagacattca   1560
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agttcaaagt ctagctattg gtataatcat ctaatattat atatatctcc agtgccctg   1860
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<210> 408
<211> 2087
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 408
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gtttctgttt tttattttaa ttcccacatt gggacaaga atcagaatat ggatagctag    180
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aatgaaatgg gcgctcacag ttttggtttt cagctcttca tgtctgtaag tgtgctttgg    360
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aggatttcca ttctaaatac cttattttga gggatttata aaacttagtt gtaaaagaag    780
aagcccacat agtgggaata aattgcttca gccattttta gtatttgaga gcactaggga    840
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ttaaaaaatt atataaactg ttaaaatatt aacacctcag gctacctgct gtattctgtc   1140
ccattgaccc ctggaattgg atttactgca agtgattgat aattcaatta tggctttt   1200
cccctttaat cttgccattt aaattacagt agaaagacaa aatcaagtaa aataaagtgt   1260
tagataatag aaagagtgtt aagaccagcc cacttttctc atgtttatgt tctttcattt   1320
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ggtttgcttt caactagatg ttcctgagac aagcagaggg acactgcaat tcccttcca   1440
tgcctgctgt tctcccccat gtaagtcttc tttgaaatta acggatgtgt ctcctttgga   1500
acagccccat aacaaaagag aactactgat ctgagcatag gaaagtagag gctctaccac   1560
ttttcagttg aaaaagcaag actttctctg tgtttctgaa acaaggcaa atgttgtcac   1620
agaatcagag atccagtctc actttccac aaatctccaa atctccagtc ttatcttgtg   1680
tgctctaatg gtttggttca atccctttcc aactcttgtt ttcaaagcat ggggcctgag   1740
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tcagagggct cttccagtag tattctcgga tgcaacctcc atttctcagt taccattatt   1860
tcctgtatca gctttgtcct tcctggaggg atgcacagtg atccggccca ccactgttgt   1920
tgtcttgtgc ttctgctctt tcctatggtt tcaggttatt ttctgggttt ccctattct   1980
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287

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tcttttattt cctttttttt ttatatttgc tttcctttct atgctttta gatttgcagg    2040
agatgcaagt ttcagctcaa tgtttggctt ctctcaatat ggaaatt                  2087

<210> 409
<211> 1811
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)..(22)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (37)..(37)
<223> n equals a,t,g, or c

<400> 409
aactaagtgg ttcccccggg nntgcagaat ttsggcncaa gccagaccag gagtgtccag      60
tccttgggcc ttggtcagcc tggagcagtt gctcggcccc ctgtggtggg ggcactatgg     120
agcgacatcg gacttgtgag ggggtcctg gggtggcacc atgccaggcc caggacacag      180
agcaacggca ggagtgtaac ctgcagccct gccctgagtg ccccctggc caggtgctta      240
gtgcctgtgc cacctcatgc ccgtgcctct gctggcatct gcagcctggt gccatctgtg     300
tgcaggagcc ctgccagcct ggctgtggct gccctggagg gcagctgctg cacaatggca     360
cgtgtgtgcc tcccactgcc tgccctgca cccagcattc tctgccctgg ggcctcaccc      420
tgaccctgga agagcaggcc caggagctgc ccccagggac tgtgctcacc cggaactgca     480
cccgctgtgt ctgccacggt ggagccttca gctgctccct cgttgactgt caggagtgcc     540
ccctggggaa acgtggcagc aggtggcccc gggcagctg gggctctgcg agcagacgtg     600
cctggagatg aacgccacaa agacccagag taactgcagt tcagctcgag cctcgggctg     660
cgtgtgccag cccgggcact tccgcagcca ggcaggcccc tgcgtccccg aagaccactg     720
cgagtgctgg caccttgggc gtccccacct gcctggatct gaatggcagg aggcctgtga     708
gagctgcctc tgcctcagtg ggaggcctgt ctgcacccag cactgctccc cactcacctg     840
tgctcagggc gaggagatgg tgctggagcc agggagctgc tgtccctctt gccgcaggga     900
ggctccggag gagcagtcgc cctcctgcca gctcctcacg gagcttygaa acttcaccaa     960
agggacctgt tacctggacc aggtagaag gagctactgc agtgggtact gcccatccag    1020
cacccatgtc atgccagagg agccatacct gcagagccag tgtgactgct gcagctaccg    1080
tctagacccg gagagccctg tgcggatcct gaacctgcgc tgtctgggtg gccacacaga    1140
gcccgtggtg ctgccggtca tccacagctg ccagtgcagc tcctgccagg ggacggggtt    1200
tcgccatgtt gcccaggctg ttcttgaact cctgggctcg agtgatccac ctgcctcagc    1260
ctcccaatgc gctggggtta caggcaggaa ccactgcacc cagccccctg acctcatctt    1320
ttaagcaagg ctgacattgc tatgcagctt tgttgggtgg acttggtgag ggcacgcgtg    1380
tgaagtggct ggcaggtgcc tagttctgtt aagcacctgc catatgataa cctgaggtcc    1440
cactgtgtgg cagatgaagg ggaaacagag gtggaaggca cccgtgccac ctgggtggag    1500
cacagtggaa ggcctggtgt tggctctggg cgtcctcctg gcaccagcct gaccactctg    1560
cctctcttac taacccatct ctccctcacg tgtcccctgg gaggtgactt ctcaagcgc    1620
taacaggctc cgctgggtga gtccacagct gtccctcttg tgatcatggg actcagcagc    1680
actgaccacg tccttccacg ctctctcacc tgcccccaac tgggggccca tgacttggca    1740
ttagcatgtt ccaaataaag tgatactggc aacaaaaaaa aaaaaaaaaa aaaactcga    1800
gggggggccc g                                                        1811

<210> 410
<211> 642
<212> DNA
<213> Homo sapiens

<400> 410
```

288

```
ggcacgaggg ggccaccaca cccggcctgt acatgctgtt ttgcatcttg ctttatacgt      60
tggggagtgc cagatgtcac catctttcgt tcttcctctg gggctggtca aatccccctg     120
agaaaactcc tctggcctcc tggcggggggg tgaaggccag gctgccaggg ccaggctgcc     180
agcttctggg agctgcaggg gcagaggcag ggagctgtca ggcattcagc cagcaagacg     240
cactcagtac ccacttgggg ttcagaatcc ccctccctca tcttcagatg ggccagatgt     300
ccccaaagcc agcggcccct ttctgtttca ccctgtctac agaataaacc cccagtcact     360
gggggtgggg gaagagtaag gggagagggg aaacgagatt tggaggtcta gctgctgctg     420
aaacagccct cagttcgtct ttattttgcc ttctgcaaaa ctggcctggt gttgccagct     480
ccttttgagg actttgctac cggttctcag catccctcaa ttgctggct aggattcatg     540
ggtttttagg ggtggggtgg gattagcatg tccagctgct ttccagtttc caaagttctg     600
tccctatcat attgcctctg atttaaaaaa aaaaaaaaaa aa                        642
```

<210> 411
<211> 606
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (19)..(19)
<223> n equals a,t,g, or c

<400> 411
```
cccccggnc tgccaggant ttcggcacga gtctctctgt caactctatt tgtatttcta      60
taatggaaac tcaaatttgc ctaactcaga ttgtagcact tttcttcct aggctagtcc     120
taggaaaact cacttgtttt ttgtatggaa aactagtgtt agtagaagcc tttattcttg     180
catagccccc aaatcagctt tttcagctat aatttagtaa gtctaatgtg ttcgactgaa     240
gtactttttt tttgtaataa caagtgaaaa ataatgaaga gtgtgtcctg gcgcatggct     300
cacgcctgta atcccagcac ttcgggaggc cggagcygag gcagcggatc acttgagggt     360
caggagttca agaccagctt gaccaacatg gtgaagtcct gtctctatta aaaatacaaa     420
aattagccag gtgtggtagt gcatgtctgt aatcccagct acttgggagg ctgagacagg     480
agaattgctt ggacctggga ggcggaggtt gcagtgaggt gagttgcgg cattgcactc     540
cagcctggac aacaagagtg aaactttgtc tcaaaaaaaa gaaagaaaaa aaaaaaaaa     600
actcga                                                                606
```

<210> 412
<211> 1118
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (482)..(482)
<223> n equals a,t,g, or c

<400> 412
```
gataaatttt gaacaccagg actctgaaaa agtttaagca tatatatgag aaatttcctg      60
aaatgttgta tgtattgtct tgtcttctta aacagaagac actgaacaga atggaatctt     120
tggttgatct ctaaggacca ccattttgag gatctcttat aatgtatgat gacatttttc     180
ggttcccaca ttttgctttt tctgttttgc cctttgaaag caggccatcg tcatttggtc     240
agttcctcct ttcttactgt ggctgtgtcc atctctaagg ggccattctt ccactctaca     300
gctcaaaaaa gaaaatccag gaaacagctt cccaggcctg ccttcctggt cccctcagt     360
```

289

```
tcccaaaaca cacaaaccag gacaaaacac cacttcagtt ttctgcatct tatagtctta        420
caaccttgag tttgggagga tcttgactca agagtcagat ggtgaaatat ctagtacttg        480
anccccttgt gtgataatgt caagagaact aaggtttggt cccagaccca acaataacta        540
ccaataggaa tctgggtagc atcttttaaa ttctttagtc ttcagtctta tctgtaaaac        600
atgggactgg tctagataat ttctccaact ccaaaattca atcatgttct taatattaaa        660
aatcctcatg tccatagatt tttgtattct ctccctggta aatcctggta atttcacagg        720
gatgtttgaa actgaaaaat cctgggaaaa gtagatttta gtcaagtcca ctccaattta        708
aaaccatact gaagtaccat tttcactcat aattataaat taaaaaatga cactatcgag        840
ggttgataag attatagaga gatggctatt ttcatgttgc cagtgagaat ataaaattcc        900
catttgggga aaaaatttat actatctatt caaaagttat atgcacttaa tctatgactt        960
gacaattcca tttctcatgt tcattttgga ggattactga cacatatcct atgcaagaat       1020
gtgattgata gcattgtttt catttgagac cagcctgggc aacatagtga gaacctgtct       1080
ctacaaaaaa tttaaaaaaa aaaaaaaagg gcggccgc                               1118
```

<210> 413
<211> 830
<212> DNA
<213> Homo sapiens

<400> 413
```
ggcacgagta aggactgtgt tctttatgca tttcttgatc caggcatggc agttcctctt         60
ttcctgtaca tattcacact cctgccactt ctacccttc tcttatccct ctgctttca          120
cctctgactg taaaaagaag tagcagttcc gaaagcaaga gttccctatg aacacggaag        180
aagacattgg caacttttga gtacaacaa tatatttaat agagtaattt aagaacatca        240
gccagtgaat tttatacaag atagtgaaag agaaaaggaa gattaattag gggtagttta        300
ggatgccatt aaatagccta gaattagggg agtagtcgtt gaatagaaag gaggccacaa        360
atttgaggga tataagctaa gaattggtaa gccaagaaga aggaaaaggt ttgggcagta        420
aggataatga ggaacaaaat agagaactca gaagcaatat ctgactgtta tcattggaag        480
aattttttg cttgcttgag gctggatatt gaagtggatc aggatacttg agtgactatc         540
tgatgggctt ttggaactag ctctcaagag gtgaaaatta gcttttttt cttttttttt         600
cttttttttt tttttgagg caggtctca ctgttgttga ggctgaacct cctgggctca         660
agcagttgtc ccattgcagc ctcctcagat actctgtaag ccaaggcagg gggaatattt        720
tgtgctcagt agtttgaggc tgtggtgagc taagatcaca ctgctgtgct cacttcagcc        780
tgggcaacac agtgaaaccc cgtctccatc tgtttaaaaa aaaaaaaaaa                    830
```

<210> 414
<211> 755
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (640)..(640)
<223> n equals a,t,g, or c

<400> 414
```
ggcagaggga aatgcatagg cttgtaatga taattaagat tcaatctcac tctcaatgag         60
atcttgggat tcctgcaagt ttgaccttca cttatgcaat ctgtaaaatg aaggcattgg        120
gcttagatga cttagatggt ttcttcagtg tcttacaggc ttacatgtta tattttgaa         180
ttgctataaa gcatgttttg caaattctga caccaaacaa tgttttgcat tcctatagca        240
cagataaacc atgtttatag tagccttact cattctccat tgggccttag gggtacagt         300
gatgtccaag tgactcgtga cctctcactt cttccacttt tccaggtaga agatcagcct        360
tgctcagcct cctgggatta ggagatgttt taagaaaagg agaatttgca tcaaagttct        420
gacattgttt gaggaaaaga ggtagatttc ctaaaaattc ccctgaagcc cataggatat        480
attctcttca aaataatgag tgggccgggt gcagtggctc acacctgtta tcccagcact        540
ttggaaggcc atggtgggca gatcacttga ggtcaggagt ttgagaccag cctggccagc        600
atggtgaaac cctgtctcta ctaaaaatac aaaaattagn ccggatgtgg tggtgcatgc        660
```

290

```
ctgaggttgc agacagccga gatggtgcca ctgcactcca gcctggcaa cagagcgaga      720
ccctgtctca gaaaaaaaaa aaaaaaaaac tcgaa                                 755


<210> 415
<211> 1939
<212> DNA
<213> Homo sapiens

<400> 415
gaacacaaac atgcagtctg tagcagatgg taataggctg ayatattaca cttgttgatg       60
taaatctgat aggtttcttt ctctccaagg acagcttttt aaatatttaa cagtatcaat      120
aatttttcag tttctgtgag aattttataa tttataattt gcagacttaa tgtataatct      180
attttgtcct aacaattaca aatatatttt ttatttcaga ttrtatatat tcctaccaga      240
tggagataat tacagcttta aaaatttta ttttttcatt ttattcaca cattgacatt        300
aaattttat ggacacataa taactgtaca tatatatggg gtagaatgtg atgttttaat        360
acatgtactc aatgtgtaat gatcaaatca gggtaatttg cataatgatt tttctgtagg      420
gagaaaattc aaaatctact cttctggcta ttttcaaata tataatatgt tattgttaac      480
tatactcatc ctactatgca ataggacacc agaacttatt cctgggttct acatccgtta      540
aggcaaccaa ggattggaaa tattggaaaa aaaaattgcg tctgtactga acatgtacag      600
actttttct tgtccttatt ccttacacaa tatagtacaa taactatttg catgacattt       660
acatcggata ttatgagtga tctagagttg atatgaagtatatgggagga tgtgcaaagg      720
tgatgtgcaa atactatgtc attttatatc agggacttga gtatcctttg ttaycctcag      780
gagatcctga aacyagtccc ccatggatac tgagggctga ctgtatagtc ctatcctcac      840
ggaactttca ttctaatgrg ggaagactga ctataaacaa aatatatgta ataggtggtg      900
gtaagtaccg tggagaagta acaaatgggg caaagtgagt tatacagctc catycttaga      960
aaccttggag tacttttctt agtttatact cgtggtggtt tccttttgtc tcctttatta     1020
catgggactc tgacatgtgc ccatagctag ggtggcagta ggatctaccc gaaaagcgtc     1080
ctgctgatac aggaccaaag catcctgttg ttctcgagcc tataaaaaga gctaatggtc     1140
ttgcttctct taactgtggc ctcctacact gtgttttgga tgattggtga tgtcttggat     1200
attctgtttc tttggaactt tgaatataca acactttact agggaattag caatggaagc     1260
agagcaaaga tgtacagagg aaacaatgcr taactctgat ggaattgaag tcatgaggca     1302
gcagagagct taaattasag cttaaaaat ttttatttt tagagggaat ttamttggga      1380
gtaacagcag taatagttaa cggagccaga atgcttgagt catataattg caaagcagag     1440
ttgggagcaa cagatgctaa agagtagttg ctgtagttcc tctttgggtc gtaggagcag     1500
ttgtcatrtt mctatayagc tactgcatga agaagagttc ttagtgaggc ctgggtgaac     1560
agctcttctt agtattctgt gtgacccccat tygacctttt aacaaatccc taagtaaata    1620
aatagcccct maggwaaact aagttttttct ctgctgtttt tttgcttgag agagctataa   1680
ctgtaataga cttatatttc tgaacatttt agtgcttgcc aatatttggt aatatttatg    1740
tttcctatat ttgtaatgaa cattcttctt cmggtacatt tyttgttaaa ttattgtttts   1800
atgsataaaa gttcaccttt tattgtataa aattgactca gattaattta tacacattga    1860
caatgggtaa atagagtttt tcagattatt aaaagctgaa ggatgcccat gtaagcaaaa    1920
aaaaaaaaaa aaaactcga                                                  1939


<210> 416
<211> 1776
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (24)..(24)
<223> n equals a,t,g, or c
```

291

<400> 416
```
ggcagaggna gacgggggtt tctnccatgt tgcccaggct ggtctcgaac tcctggactc      60
aagcaatccg cccaccttra cttcccaaag tgctgggatt atgggygggt gtragccatt     120
gcgcccagcc ttgaagtcat gttctaaatt gtatttgaat ttgtgcctct ttgttttttcc   180
ccaaaccaaa gccctcaaat tgtagtctct gtcggcttct gcagaattct ggaaaatgcc    240
agttttcctc ccccgccctt gttttccata aaacatattt atatattgtg atgaggagta    300
ctttctgaag agtacttcgt attttttttt aattgccttg tttgccttca acttccttga    360
ttttcatagt ttacatgggt gtgtgtaggg gtgtgtgtgt gtatgtgtgt ggytagggc     420
tttttttcgtt gcatgtgatg gttctgtgga catatgatcc ccacaaactg tgggagtgat   480
tggccaggcc ttgttttktt tgtttgtttg tttgtgtttt tgttctttttg aagaatagag   540
tggtatttag aaaataaatt gcattgcaaa gctcttatcg gctcatatga gagagcaggt    600
tcctgccctt gaaaatgccg gtaagctata gcatatgttt tttaagactt aagcatttca    660
tgctttaaaa taccttcaca agtgaacatt acacacagaa gttcatttgg ttttcctttg    720
ttttatggtg catatagcaa taaagacccc cctccaccct gcaaccccca tcccccaccg    780
ggcctttgtc cctgccttgg ctttttctccc cttctcattc tcctctccc tttcctcact    840
gaaggctgtg agttgctttc aatgtgacaa cactatgatg tcatttggaa ggatttgcca    900
ggacagactg attctgagtc ctgggtgccg tatgtgtatg cggcagtgtt gtcaggcgat    960
cttgtttgaa gctctatgtt gccataatta ccatcaagta cacactgttg gcaaaaggct   1020
aacacctgac tttagaaaat gctgatttga gaacaaaagg aaaggtcttt tttcactgct   1080
taaagtgggg tcactttgat acctttgcgg tcatgtctgt gtctgatgag tgtagaatct   1140
ctggatgtgc actgtcagtc atgtgtccac caggcctcga atatcatatg ggaaatgtca   1200
tagttaaaaa cgtacagcca ggcccgtgtg ctgttaatag tggaaattg tcatgttaaa    1260
aaaaaaaaca aaacaggaac caaatgtgac cttgtgcata tattggtagc tgaaaatctt   1320
caaggctact gatgggtggc cccttaatct tgtctttgat tgctgtgtgc agggaaaggt   1380
gtccccgttt gttcatgctg ttttggggggg tggggggggta tttgcaagaa tactcatttt  1440
gacataatag gtcctcttgt cagagatcct ctaccacaga cattaatagc tgagcaggag   1500
ccacatggat tgattgtatc cactcaccat tgacgatggc attgagcgta gctagcttat    1560
ttccaatcct acgtgttttt gagcttgctc ttacgtttta agaggtgcca ggggtacatt    1620
tttgcactga aatctaaaga tgttttaaaa aacactttc acaaaaatag tcctttgtca    1680
ttacattatt tactcatgtg tttgtacatt tttgtatgtt aatttatgaa tgatttttc     1740
agtaaaaaat acatattcaa gaaccaaaaa aaaaaa                            1776
```

<210> 417
<211> 682
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (624)..(624)
<223> n equals a,t,g, or c

<400> 417
```
gcaaatatta attgccattt actttgaaac ctaaaatggt caagattcca ttttcctcca     60
ggctaataaa taataatttg caatatatag attgtatttt gtctttgaaa cgctgtgagg    120
agatcctctt aatgtggcat ggtctgcttc tatgcttgc ttctgtgttt cttgagctcc     180
gtggagatag gcccctctc ctggcttctc tgcttgagcc acataaaatg ccacttcaca    240
gctcttccct ttgaagcctg atccagtatg catttggagc taattactgc agttgacaca    300
actccatcta aaagcgtcat gaaagattct gtaatcactg ataagaaaat gatcttgcaa    306
attattgctg tgtcctcctt tattgcctct ttaccttaac agtacagttt acaataatgt    420
aaattttttt ctaatctttc aactttaacc ctagaaattg tagatgtttt agcagtggtt    480
atgtgatatt ggcacaacat aactatataa tttgctcaat attgtggtgc atacctgtaa    540
tcccagctgc tcaggagtct gaggcatgag aatcacatga acccaggaga tggaggttgc    600
ggtgagctga gagcgagtca ctgnactcca gccaggacga cagagtgaaa ccctgtctca    660
aaaaaaaaaa aaaaaactcg ag                                           682
```

<210> 418
<211> 739
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (649)..(649)
<223> n equals a,t,g, or c

<400> 418
gctggactca gagctctaac gacagctgcc tcaaaaagaa aataacatcc cttgttcatg   60
cttgccagaa aacggcagca gaagcaggcc caagggcatc ctctacctcc tggcattcat   120
ttttgcctct gtcatctcat gcaggtgtgt ctgcttggtg gaaactgggt ttcacaacag   180
agtccaagat gtaaaggagt ttggaaaatg tctaatgtgg cttttgatgt atgtaaggga   240
aatatttaag gcaatcctat tgtaaatgag agaggataaa gggatacaat gggagttaag   300
tgtgctgcag ttcactcgaa ctggtaaaat gtcagcccca gttgactttg ataaatattg   360
catatgccag ctgccccagt cacagtcttg aagctcttgc cctttccttg tgtgtgtggt   420
ttaggatggg ttcccattgg ctgtgtttcc atcccatctc atctcaaggg aaatctctgc   480
tgctcctgag cacctcgtgt catagatttt atactcttac agacttggaa tgcagtagag   540
gtatgtggaw ttttaggggt ttgttttttt aagaataagt aacaagaaat aacacatttc   600
ttaataatag cttttttgac atagtttgga gtctgattat atggtacant tttctaccag   660
taatataggg ttgccaataa atagaaaakg ttttctaaaa ataaatttta ttacaacaaa   720
aaaaaaaaaa aaaactcga   739

<210> 419
<211> 1126
<212> DNA
<213> Homo sapiens

<400> 419
ggcacgagat tgcctacaaa tgtcagaggt ataatggttt ggttttcatg ctggcttctc   60
acacagtcca tcacagtgat tcttggagcc agagggaggt atggaagact gtgtgttctc   120
caagggaggc actgtggtct ggtggataag agtgggagtc ccaatccttt ctccgcagat   180
gtgctagctg tgcactctgg gcaagtttct cactctcctg agcctcagcg tctttatcaa   240
tatgacgaga ataaatacag cacctgccta cctcatgggg ttgtttcagc agtcaatgag   300
atcatgtata tgaagcattt agtataccta gcacctaata aaagctcaac aaccagtagt   360
cttattacta acaaaatgga gctagaagga tgcattagtt taaacaaaat cttgaggcag   420
atactgggag tacctgtctt tattcttcaa cttgagtctc ctcccagttt gtttggataa   480
aaactcaaat gtaatatttt taatttgggt aaaagaactt ctgagaaagg gttgaacatc   540
tatccacttg cctttttatg cctagggaac tagagatact tgttggcggc atcgcaaatg   600
ttgctgactt atgaagtact gcagtatctg aatacctttt tgtaggataa tctaaagttt   660
ccaaaaaata gtatagtgtt gtagtgaaga acttggactc ttaagccaga ttattttgtt   720
cagattcaga aatcccctcc actccaccca ctggctgtat agcctgccc aaatcactga - 780
atctctgtgt gtctgcgtcc tggtgtgtga aatgaggaca atagtagcta ttgggtaggg   840
ttggcctggg gtctaagtga tgactgcctg taaggtgttt agaacagtat ttggtaaaca   900
actggcactc aatcagtgtt gctgtgatta tgatgattta ttccaaggtt gcttgctttc   960
cagtacatca tagactacta cttgaccaaa tttactagca atggagtacc tgaaagtttt   1020
acatgtgcac atttgcatga aaaccccaca aaatttccct ttgaacagtg aaggggacgg   1080
cacaaagata attcttggca ctaagcttaa aaaaaaaaa aaaaa   1126

<210> 420
<211> 851
<212> DNA
<213> Homo sapiens

<400> 420

```
gctcccacag ataattgaga atatgcagta tttggttttc tgtgtctgct ttagtttgcc      60
taggatattg gcttctagct gcatccatgt tgcagcaaaa gacacaattt tattctattt     120
tatggctgtg tagtattcca tggtgtgtat gtaccacatt ttctttatac agtccaccat     180
tgatgggcac caggggttgat tttatgtctt taaatatgtg ctgcaatgag aaaaaacata     240
ttttctacaa aatgatagaa gtttaaaagg acaagtttat gggttagcta attggcttcc     300
cattttattc tctaattctc ttatattgac acttcttgag atttaatgtt gtttgccagg     360
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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<211> 1462
<212> DNA
<213> Homo sapiens


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295

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<212> DNA
<213> Homo sapiens

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296

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<211> 2657
<212> DNA
<213> Homo sapiens

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<211> 2410
<212> DNA
<213> Homo sapiens


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agtttttatta ttgagagtgt aaattataca agtatttaca cataaaaaag ttcatataat  1920
tgaggtaaat ataatttaga actgtttctt taatgctttg ttttttgctc acttttttgct  1980
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298

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<210> 428
<211> 2131
<212> DNA
<213> Homo sapiens

<400> 428
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gctcgctgcg cccgccgccg cgctcgtccg aatcccgctg cacaagttca cctctgtgcg   180
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<210> 429
<211> 2794
<212> DNA
<213> Homo sapiens
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<220>
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<222> (164)..(164)
<223> n equals a,t,g, or c

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cgcttttcat ccgtaacatt gtatcaccgg gtgcaccacc agancgtttt ttcgcaggaa   180
gcgaagtcat tctctccggc gtctacactt aacttgtata tttgttctag ccaatttcag   240
tcacttcaga aactttactg tggcgtaatt ccagttctta ggtacgcgag catagagtga   300
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<210> 430
<211> 2048
<212> DNA

300

<213> Homo sapiens

<400> 430
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cttgaggccg agtgaacgtg gttttggaag attgcttaaa caaagaatgg aggccagagt     180
ggtgcacgca ttgcagaaaa ggcaagtgtc acttctttgt gtgtttctgg gagtgtcttg     240
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ggccaaccta gcaattgatc tggggttagg ggtggaggaa ctgtcagctc ggggatgtag     360
aattgtttca gatgagacca taggattttt actcctcaat ccgcttactg gtgatttact     420
tctaaatgag aaaattagacc gagaggaact gtgtggcccc acagagccat gtgtgttgcc     480
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taccactcca ggggcaacat ttctcctaga aagtgcacat gattcagatg ttggaatcaa     660
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cacggcgc                                                            2048
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<210> 431
<211> 2406
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1934)..(1934)
<223> n equals a,t,g, or c

<400> 431
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aaagggaggg atgaccttcc tagggagag cccacgacct gtcctgtctt tgatcgcctc     180
tttgacattt ttgccaaaat accactagtg gaaagtcagg ctagctgtgc tcgtattgga     240
atagcagcct cacactggcg tctggactgt tctgtagatg gaatgcaagc ggactgtctg     300
tctttaatct aacttattgc tagagaatag ggttttaaga cgaaaagaaa actgaaagg     360
gattggccct cattcagtga gttctgtggt tccagtaagg atttgtatgt acatacgctc     420
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<211> 1669
<212> DNA
<213> Homo sapiens

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<210> 433
<211> 1491
<212> DNA
<213> Homo sapiens

<400> 433
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tttggggacc ccatcgttta agggacaggt ctccccagaa gagcagtgtt atcgtgaacc   960
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aaggggcgcc tgtcagcaca cagcctgccg cggcgccggc cgggagcgcg ctcctgggga   1140
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gatttggtgt ttcctgtctg gcagctgtgg tcatgatgt ggtgcggaag cccaggcttc   1320
tcaaagctct tacgttgcct gggattcggt gggggggagt cgggggggtgg agggagaaga   1380
cggccctgtg agattgccca agtgatgaat aaagtacgtg accccgcaaa aaaaaaaaa   1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a          1491
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<210> 434
<211> 571
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (249)..(249)
<223> n equals a,t,g, or c

<220>
<221> misc_feature

<222> (548)..(548)
<223> n equals a,t,g, or c

<400> 434
tcgacccacg cgtccggggg cgtacgcggg caagatggag gcgactacgg ctggtgtggg   60
ccggctagag gaagaggcgt tgcggcgaaa ggaacggctg aaggccctac gggagaaaac   120
cgggcgcaag gtgagaagtg tggagtgagg gtcgcagttg aggcgtccag cgttcggggt   180
ccgggtcgcg cttgaggaga gcaaagggct aataaggaaa gacagctgcc gagggcggc   240
atgccgggnc gctaacgcat gcgcgagaag acgggcgccc tcccacgatg tctggggctg   300
cttggcgtgg gactcctctg gcgctggtgc ggtcgtcgcg cacgcgcggg ggtgggcaar   360
gcatggtcag cgacccgcag tccatctgac tcctgcttcc cgggtgttgc tcgtgtaggt   420
atctagggct gcctgtaggt tcagatgctt gttgggttag gcgtgatttg ttccgttcct   480
ctatggccta gctggtcttt aaccccgcc ttcgattctg agtcagacag actccccagt   540
tcgggcangc aattcccttg gaacaagggc a   571

<210> 435
<211> 2087
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (56)..(56)
<223> n equals a,t,g, or c

<400> 435
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ttgcagaacc cccacgcgac agcctgcggg aggaacttgt catcaccccg ctgccttccg   180
gggacgtagc cgccacattc cagttccgca cgcgctggga ttcggagctt cagcgggaag   240
gagtgtccca ttacaggctc tttcccaaag ccctggggca gctgatctcc aagtattctc   300
tacgggagct gcacctgtca ttcacacaag gcttttggag gacccgatactggggccac   360
ccttcctgca ggccccatca gacactgacc actactttct gcgctatgct gtgctgccgc   420
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aggcagtgca tatccgccct gtttgcagaa atgcacgctg tactagcatc tcctgggagc   600
tgaggcagac cctgtcagtt gtatttgatg ccttcatcac ggggcaggga aagaaagact   660
ggtccctctt ccggatgttc tcccgaaccc tcacggagcc ctgccccctg gcttcagaga   720
gccgagtcta tgtggacatc accacctaca accaggacaa cgagaatta gaggtgcacc   780
cacccccgac cactacatat caggacgtca tcctaggcac tcggaagacc tatgccatct   840
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cgacaccgga cttcagcatc ccctacaacg tgatctgcct cacgtgcact gtggtggccg   1500
tgtgctacgg ctccttctac aatctcctca cccgaacctt ccacatcgag gagccccgca   1560
caggtggcct ggccaagcgg ctggccaacc ttatccggcg cgcccgaggt gtcccccac   1620
tctgattctt gccctttcca gcagctgcag ctgccgtttc tctctgggga ggggagccca   1680
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caggtcaggg cctacagctg tgttgtccag tacaggagcc acgagccaaa tgtggcattt   1800
gaatttgaat taacttagaa attcattttcc tcacctgtag tggccacctc tatattgagg   1860

304

```
tgctcaataa gcaaaagtgg tcggtggctg ctgtattgga cagcacagaa aaagatttcc    1920
atcaccacag aaaggtcggc tggcagcact ggccaaggtg atggggtgtg ctacacagtg    1980
tatgtcactg tgtagtggat ggagtttact gtttgtggaa taaaaacggc tgtttccgtg    2040
rwwaaaaaaa aaaaaaaaaa gggcggccgc tctagaggat ccctcga                  2087
```

<210> 436
<211> 1409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1180)..(1180)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1384)..(1384)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1392)..(1392)
<223> n equals a,t,g, or c

<400> 436
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acaaagtgac gaaaggaaac agcgacggaa gcgcaaccga accctggaat tggtgtctcg     120
actggtccat tcccggccca cccccattaa ccggctcgag ccactcccag gacgaagtca     180
aggcctcgga aggcgactac aactcccagc aggtcgagca gctccgcccg cgctgattct     240
ccattggcct tccggggggtg gggattagat gggaggtggc cgtgggctg cggccgggat     300
ttgtcccctc ttcggcttcc gtagaggaag tggcgcggac cttcatttgg ggtttcggtt     360
cccccccttc cccttccccg gggtctgggg gtgacattgc accgcgcccc tcgtgggggtc    420
gcgttgccac cccacgcgga ctccccagct ggcgcgcccc tcccatttgc ctgtcctggt     480
caggccccca cccccccttcc cacctgacca gccatggggg ctgcggtgtt tttcggctgc     540
actttcgtcg cgttcggccc ggccttcgcg cttttcttga tcactgtggc tggggacccg     600
cttcgcgtta tcatcctggt cgcaggggca ttttttctggc tggtctccct gctcctggcc    660
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tcacccatct ccatccgcca gatggcctat gtttctggtc tctccttcgg tatcatcagt    900
ggtgtcttct ctgttatcaa tatttttggct gatgcacttg gccaggtgt ggttgggatc     960
catggagact caccctatta cttcctgact tcagcctttc tgacagcagc cattatcctg    1020
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ttgggcctgg tggttgggag tcacctactg acatgggac tgacattcct gaacccctgg    1140
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tcacagctgg agggcccty gaagtattca gcgcagcytc ttgkgaagga ctgactacct    1260
ggactgatcg ctgacagatc acctgctgtc mctgccatga ctgagccagc ccagccggtc    1320
cattgccaaa tctctctttc gcggctaccc atactcaggt ttgttgcctt tggacgtagc    1380
ttanttacag anagctggtc agcagcagt                                      1409
```

<210> 437
<211> 2571
<212> DNA
<213> Homo sapiens

<400> 437

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ctgcgtggtg aggccggctc tgatgtctct ttggtggacc tcggctttca gacggatttc     180
cgggtgtacc tgcacttacg gcagacctgg ttggccttta tgatcattct gagtatcctt     420
gaagtcatta tcatcttgct gctcatcttt ctccggaaga gaattctcat cgcgattgca     300
ctcatcaaag aagccagcag ggctgtggga tacgtcatgt gctccttgct ctacccactg     360
gtcaccttct tcttgctgtg cctctgcatc gcctactggg ccagcactgc tgtcttcctg     420
tccacttcca acgaagcggt ctataagatc tttgatgaca gccccctgccc atttactgcg     480
aaaacctgca acccagagac cttcccctcc tccaatgagt cccgccaatg ccccaatgcc     540
cgttgccagt tcgccttcta cggtggtgag tcgggctacc accgggccct gctgggcctg     600
cagatcttca atgccttcat gttcttctgg ttggccaact tcgtgctggc gctgggccga     660
gtcacgctgg ccggggcctt tgcctcctac tactgggccc tgcgcaagcc ggacgacctg     720
ccggccttcc cgctcttctc tgcctttggc cgggcgctca ggtaccacac aggctccctg     780
gcctttggcg cgctcatcct ggccattgtg cagatcatcc gtgtgatact cgagtacctg     840
gatcagcggc tgaaagctgc agagaacaag tttgccaagt gcctcatgac ctgtctcaaa     900
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attgccatct acggcaccaa tttctgcacc tcggccagga atgccttctt cctgctcatg    1020
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taatagctgt ttaatggaaa cctgctgggc tggagggagt taggctgaat ttcccgactt    2160
cctctgccag ttattgacac agctctcttt gtaagagagg aaagaaacta aacccaccca    2220
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tgtcccagga tcctggagag ggagaacccc tggccccagg ggaaagaggg gggggtctcc    2460
cgtttcctgt gcctgcacca gccctgcccc cattgcgtct gcacacccct gcgtgtaact    2520
gcattccaac cactaataaa gtgcctattg tacaggaaaa aaaaaaaaa a             2571
```

<210> 438
<211> 3080
<212> DNA
<213> Homo sapiens

<400> 438

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acttttgggt atatgttata gccatgtatg tatgtcttct tttttctatt ttctcttgtt     180
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aagacagagc agaagacccc atccttgagc tggtctcccc tgggtatggg ctgaggtaac     300
atcccacaca ccaggacgat cttccctgcc tcccatcggt cacattaaga cattttcaaa     360
gtgtaatatt ataaatggac ctacctctaa atattgactt tacagttatt ttatgaggca     420
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ctcaatttat agctaagggt tttcagtcta gtgtcatgaa agagataaaa gggtgttcac    480
agattattta agacataagg ctggtcaggg atgagtcaga gagtcattct ccatgaagtc    540
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atctgggacc ctcccctttcc ctgatccctg ccaccaccac tcaatcggcc agataatcaa    660
ttgtttctga ggtcactttc acataatctt ggcaacttta gttgttgaaa gcatgcatgc    720
aggggcaaca tggtgttacc tgttgctttt ttttccccc ttctaagctc cttaccagag    780
agcagatcta aggatactgt gtaacttgaa ataaccggca ttttcagact ttgccatttc    840
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<210> 439
<211> 1837
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (48)..(48)
<223> n equals a,t,g, or c

<220>

<221> misc_feature
<222> (987)..(987)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1037)..(1037)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1312)..(1312)
<223> n equals a,t,g, or c

<400> 439
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ctctgagctg caggacacag gcaggacaac gggagcacac tgccaggatg ggagctgctg    360
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aagcctgtga ggcccaaact cacagtcacc attgacacca atgtgaacag caccattctg   1620
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gattactcca tgtaccaggc agaagagttc caggtgcttc cctgcagatc ctgcgccccc   1740
aaccaggtca aagtggcagg gaaaccaatg tacctgcaca tcgggggtcg acgcggccgc   1800
gaatcccggg tcgacgagct cactagtcgg cggccgc                           1837
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<210> 440
<211> 1188
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (892)..(892)
<223> n equals a,t,g, or c

<400> 440
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ccccgcaccc cagcaggcgg ctcccgcggg cgccggctcc cggctacgaa gcgaggaacg   180
agcgggcggc gggcacgagg cagctctgga cggatcaatg caagccagac gatgaccagt   240
tgtggccagc agtccttgaa cgtgctcgcc gtcctcttct cattgctgtt ttctgcgtc   300
ttgtctgcac atttccgggt ctgtgaacca tacacagacc acaaaggccg ctaccacttt   360
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aacacggtct tcaaatactg ctgcaacgag acggagttcc aggcggtgat gcaggcgaac   480
ctcacggcca gytccgaggg ttacatgcac aacaattaca ccgccctgtt gggagtgtgg   540
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aactacgaca tctgcaaggt ctacctggca cggtggggca tccaaggacg atggatgaaa   660
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cagccgcagc ctcccccagg cccgctgcca caagccccac aggccgtgca cacattgcgg   780
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tgctgtgcct caggatgggg gagatgagat ctgaagcacc cggtgcagcc tncgagaaga   900
acaacttcta cagagatgcc agggacagcc gaggtagcgg cgrtggcaca ggaggaaatg   960
ctgcctgtgc ccaaagcccc cttccacgga cttctaagat taggagcaaa ctcaggggta   1020
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ttgggctggt ggcttctgag aggtgactca ttgtggactc aggatgcca agacaaaggt   1140
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<210> 441
<211> 3369
<212> DNA
<213> Homo sapiens

<400> 441
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gcgccacgcg tcgaaagcgc aggccccgag gacccgccgc actgacagta tgagccgcac   180
agcctacacg gtgggagccc tgcttctcct cttggggacc ctgctgccgg ctgctgaagg   240
gaaaaagaaa gggtcccaag gtgccatccc cccgccagac aaggccagc acaatgactc   300
agagcagact cagtcgcccc agcagcctgg ctccaggaac cgggggcggg gccaagggcg   360
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tttctacatc cccaggcaca tccggaagga ggaaggttcc tttcagtcct gctccttctg   600
caagcccaag aaattcacta ccatgatggt cacactcaac tgccctgaac tacagccacc   660
taccaagaag aagagagtca cacgtgtgaa gcagtgtcgt tgcatatcca tcgatttgga   720
ttaagccaaa tccaggtgca cccagcatgt cctaggaatg cagmcccagg aagtcccaga   780
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carggttcct aaattaattc acttaaccat gatgcaaatg tttttcattt tgtgaagacc   1322
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cttgaaaggc caataccaga acacaggctg atgcttctga aaagtcttt tcctagtatt   1500
taacagaacc caagtgaaca gaggagaat gagattgcca gaaagtgatt aactttggcc   1560
gttgcaatct gctcaaacct aacaccaaac tgaaaacata aatactgacc actcctatgt   1620
tcggacccaa gcaagttagc taaaccaaac caactcctct gctttgtccc tcaggtggaa   1680
aagagaggta gtttagaact ctctgcatag gggtgggaat taatcaaaaa cckcagaggc   1740

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gagtaaggaa ataaagggaa ttgcctctgg ctagagagta gttaggtgtt aatacctggt    2040
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ctgttaggag agcatagcat catgatgtat tagctgttca tctgctactg gttgatgga    2160
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<210> 442
<211> 558
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)..(27)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (39)..(39)
<223> n equals a,t,g, or c

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ttcgcggccg cgtccgactc atgactgtgt tggcacttta aaaatattga tatcccacaa    180
taaacagggt tatcattgat ataatttccc acatatttta ctataaataa tcgagtaaca    240
acctgtcttg taccattctt tacagaaagg cttttctcaa tgcgttagtc agggtttctt    300
cccgggggaga aaatttataa tccttaatga ggccagtact cagaaggaca tttctgctta    360
ctctttctc tgtaattgcc ctcactaaaa taaagcatga cttttttatc atgtgttcac    420
acatgcagtg catccctaga gtttttctga agcatgaatt caataacata taattagacc    480
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tcactagtcg gcggccgc                                                  558


<210> 443
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<211> 2499
<212> DNA
<213> Homo sapiens

<400> 443
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cccagccatc tgctggtggc acctctccct cctgccgcct ccctcggtga accccacctt   180
gcagaagtgc agctcgcccg gagcagccca ggagctcagc atgcgtcccc caggcttcag   240
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cacctgtgaa tgtgatgaga gggactgtag agctgtctat gaccgatatt ctgatgactt   1080
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caaaaactgg tcattaagtc atctgacatt aaatcattta gccactaagt tatttgtgta   2400
ctctcacttt aaactcacca aagaagattc tcttaaagaa attatgaaaa atgtacaatt   2460
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<210> 444
<211> 1623
<212> DNA
<213> Homo sapiens

<400> 444
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ccttgcttca gcaacatgag gcttttcttg tggaacgcgg tcttgactct gttcgtcact   180

311

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tctttgattg gggctttgat ccctgaacca gaagtgaaaa ttgaagttct ccagaagcca    240
ttcatctgcc atcgcaagac caaaggaggg gatttgatgt tggtccacta tgaaggctac    300
ttagaaaagg acggctcctt atttcactcc actcacaaac ataacaatgg tcagcccatt    360
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tgtgtaggag agaagagaaa gctcatcatt cctcctgctc tgggctatgg aaaagaagga    480
aaaggtaaaa ttcccccaga aagtacactg attttaata ttgatctcct ggagattcga    540
aatggaccaa gatcccatga atcattccaa gaaatggatc ttaatgatga ctggaaactc    600
tctaaagatg aggttaaagc atatttaaag aaggagtttg aaaaacatgg tgcggtggtg    660
aatgaaagtc atcatgatgc tttggtggag gatatttttg ataaagaaga tgaagacaaa    720
gatgggttta tatctgccag agaatttaca tataaacacg atgagttata gagatacatc    780
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aaa                                                                 1623


<210> 445
<211> 2214
<212> DNA
<213> Homo sapiens

<400> 445
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cagcaagggg gattcagtgc caatgcatca acaaaaaaga caaccagagt tagtggaagg    180
aaatcttcct gtttttcgtgt tcccccacgga gctcatattt tatgcagatg tacagtcaac    240
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gtgtactact ccaaataagt atgttgtcgt tgatgctgca ggtgcagtaa agcctcagtg    360
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taataggaag gaaaaatcac tttatctttt cttccaagcc cctccctgcc tgacttaccc   1440
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tccatctcaa gtcctgtgtg tgcacgtgtg tgcaagtgca catgtgtgtg tgtaataaca    2100
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aaaaaaaaa aaaaaaaaa aaaaaaaaac tcgaggggg gtcccgtacc caat             2214


<210> 446
<211> 590
<212> DNA
<213> Homo sapiens


<400> 446
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agcgaacagt gccgccgtgt gtccagccag gtcaccgttg cctcagagct gagacacagg    180
cagtgggtgg aaaggacgct gcggtctcgc cagcggcaga actacctgcg tatgtggagt    240
agtatcagac tactgtcccc tgtgctcagc ctgatactgt tactcattgc gctggagttg    300
gtcaacattc atgctgtttg tgggaagaat gcgcatgagt atcagcagta cctaaagttt    360
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aagtggaatg aaactatcaa tcttacrcat acagctttgt tgaaaatgtg gactttagt     480
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<210> 447
<211> 2527
<212> DNA
<213> Homo sapiens


<400> 447
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gcagagagca accaatgtca cctaccaagc ccatcatgtc agcaggaaca agagaggtca    180
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aaggcaaatt catgaaggtg caagtttacc gttttttgaa gtatttgttg atgctcctct    540
gcatgtttgt gaacagaggg atgtcaaagg actctacaaa aaagcccggg caggagaaat    600
taaaggtttc actgggatcg attctgaata tgaaaagcca gaggcccctg agttggtgct    660
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taacttgtca gtacctatag ttctgactgc gactcatgaa gataaagaga ggctggacgg   1020
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gttttttgag cacaggaaag aggagcgctg tgccagacag tggggaacga catgcaagaa   1140
ccacccctat attaagatgg tgatggaaca aggagattgg ctgattggag agatcttca    1200
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313

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gctaaagcag aaatttaaag atatgaatgc tgatgctgtc tttgcatttc aactacgcaa    1320
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gaccacatag tctctgttgg catttctttg tggtgtctgt ctggacatgc ttcctaaaaa    2040
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ctttccagtc agctattggt ctttccagct gttataatct aaagtattct tatgatctgt    2460
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<210> 448
<211> 4712
<212> DNA
<213> Homo sapiens


<400> 448
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gggagagccc tgagcagagt gagcaacatc gcagccaagg cggaggccga agagggcgc    180
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gcagagccac tctgcmtgcg cctgcctctc agtgtmtcca actttgcgct ggaagaaaaa    300
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gcaggccaac gaggctktgc tctcccgacc cgaactaaag ctccctcgct ccgtgcgtg    480
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atggctgatg ttggaactgt gtgtgatccg agcagaagct gctccgtcat agaagatgat    1680
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314

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ggtttacaag ctgccttcac cacagcccat gaattaggccacgtgtttaa catgccacat    1740
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tcaatgcttt ccaacctgga ccacagccag ccttggtctc cttgcagtgc ctacatgatt    1860
acatcatttc tggataatgg tcatggggaa tgtttgatgg acaagcctca gaatcccata    1920
cagctcccag gcgatctccc tggcacctcg tacgatgcca accggcagtg ccagtttaca    1980
tttgggggagg actccaaaca ctgccctgat gcagccagca catgtagcac cttgtggtgt    2040
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aagaatggag ggaagtactg tgaaggcaaa cgagtgcgct acagatcctg taaccttgag    2340
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attatatcgc ttttgtggaa gtgcatataa aatagagtat ttatacaata tatgttacta    4680
gaaataaaag aacacttttg gaaaaaaaaa aa    4712

<210> 449
<211> 1051
<212> DNA
<213> Homo sapiens
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315

<400> 449
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aaatcataca taagaggaaa actaggactg gaagaatatg ctgtctttta cccaccaaat       120
ggtgttatcc cttttcatgg attttcaatg tatgttgcac cactttgttt tctataccat       180
gaaccttcca aattgtatca gatattccgt gagatgtatg tgcgtttttt cttcagactc       240
cattccatct cttctcatcc ttctggtatt gtgtcactct gtctgctgtt tgaaactctt       300
cttcaaactt atcttcccca actcttttat catctacgag aaattggggc tcaaccactt       360
cgcatatcat ttaagtggat ggttcgagct ttctctggat acttagctac agatcagctc       420
ttgctttttat gggatagaat cctaggatac aætctctgg aaattcttgc tgtgctggca       480
gctgccgtgt ttgctttccg agcagtgaac ctgatggagg tgacatcact ggctgcagct       540
gaaaatctag ctgcccacag tgaacagttc tgcactgctc ctctattccc tgagctttac       600
agagtccaga tccctgtact gctgaactca ggcagaaaga agagtgcagt ttattggact       660
ccaatctcat tcaacagaac aaagaagttg aggttgcaag gaagaaccta taatgatggg       720
tcatggaata taacctagaa aagaagagaa ataaaagaga ctgtgtttca ccatgttgcc       780
caggctggtc tcgaacttct gagctcaagc aatccaccct cctcagcctc cagaagtgct       840
gggattacag gcatgagaca ccaagtœag ccataaggtt cttattctat atatacatga       900
aatgatatca cttgaaggta gactgtgata agttaaatac gtatatttttt taaatcttca       960
aacaaccact aaaataaaag aacaaagagt tacaactaaa aaaaaaaaaa aaaaaactac      1020
gtaggggggg acggcgtacc caattacgcc c                                    1051
```

<210> 450
<211> 707
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (562)..(562)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (570)..(570)
<223> n equals a,t,g, or c

<400> 450
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gggtcgaccc acgcgtccgc œcacgcgtcc ggtttctaca acccttagga acatcagaat        60
catgtgtgtg tgggtgctta ttaaataaam sagttcctgg agctcactcc cagtgactgc       120
cagtctgatg attaggggct cagctaggac ctaggtttgc gaaagctccc agctgatctc       180
atgcagccag cctggctctg gctctggckc tgggagctgg gttgggaact agctttggt        240
gctattctgc tgawacttca agatgggctc tttgactccg tcttgtattg tcakcacttg       300
tattcaggtc tgttcttccc ctggattgta aactccttga tgtctgggtc atctcagctc       360
atgagctgag cttwcagtgg gtgctcagtg gaacagatgc tgaatggagt caggctgtag       420
ggaggccagc gtgtgttggt aagtgagaga caaaaatcat tttaaaaaga atcttttgc       480
ccttcagttg tgtttgccat gagttaatgt gatttactct agtggaagcc agtgcagctt       540
aagtggaggt cttgccctga antggagccn ggttatggat cagcagagct gccaaaagcg       600
ttttggggga aatgtttctg tgtcaccctc agttgattga actcaagtt tcactcccgt       660
ttaacaccac gtggggggcca ttctgacttc tgcggagtgg gtatgat                   707
```

<210> 451
<211> 1945
<212> DNA
<213> Homo sapiens

<400> 451
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gagcttgtaa gaaggctcat gccattgacc ctcttaattc tctcctgttt ggcggagctg        60
acaatggcgg aggctgaagg caatgcaagc tgcacagtca gtctagggg tgccaatatg       120
```

316

```
gcagagaccc acaaagccat gatcctgcaa ctcaatccca gtgagaactg cacctggaca    180
atagaaagac cagaaaacaa aagcatcaga attatctttt cctatgtcca gcttgatcca    240
gatggaagct gtgaaagtga aaacattaaa gtctttgacg gaaccbcag caatgggcct    300
ctgctagggc aagtctgcag taaaaacgac tatgttcctg tatttgaatc atcatccagt    360
acattgacgt ttcaaatagt tactgactca gcaagaattc aaagaactgt ctttgtcttc    420
tactacttct tctctcctaa catctctatt ccaaactgtg gcggttacct ggataccttg    480
gaaggatcct tcaccagccc caattaccca aagccgcatc ctgagctggc ttattgtgtg    540
tggcacatac aagtggagaa agattacaag ataaaactaa acttcaaaga gattttccta    600
gaaatagaca aacagtgcaa atttgatttt cttgccatct atgatggccc ctccaccaac    660
tctggcctga ttggacaagt ctgtggccgt gtgactccca ccttcgaatc gtcatcaaac    720
tctctgactg tcgtgttgtc tacagattat gccaattctt accggggatt ttctgcttcc    780
tacacctcaa tttatgcaga aaacatcaac actacatctt taacttgctc ttctgacagg    840
atgagagtta ttataagcaa atcctaccta gaggctttta actctaatgg gaataacttg    900
caactaaaag acccaacttg cagaccaaaa ttatcaaatg ttgtggaatt ttctgtccct    960
cttaatggat gtggtacaat cagaaaggta gaagatcagt caattactta caccaatata   1020
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gatgtaatac aaagtcaaaa tgcactgggc aaatataaca ccagcatggc tctttttgaa   1200
tccaattcat ttgaaaagac tatacttgaa tcaccatatt atgtggattt gaaccaaact   1260
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tgtagtcgag atgaaacttg taaggtgtat cccttatttg gacactatgg gagattccag   1440
tttaatgcct ttaaattctt gagaagtatg agctctgtgt atctgcagtg taaagttttg   1500
atatgtgata gcagtgacca ccagtctcgc tgcaatcaag gttgtgtctc cagaagcaaa   1560
cgagacattt cttcatataa atggaaaaca gattccatca taggacccat tcgtctgaaa   1620
agggatcgaa gtgcaagtgg caattcagga tttcagcatg aaacacatgc ggaagaaact   1680
ccaaaccagc ctttcaacag tgtgcatctg ttttccttca tggttctagc tctgaatgtg   1740
gtgactgtag cgacaatcac agtgaggcat tttgtaaatc aacgggcaga ctacaaatac   1800
cagaagctgc agaactatta actaacaggt ccaaccctaa gtgagacatg tttctccagg   1860
atgccaaagg aaatgctacc tcgtggctac acatattatg aataaatgag gaagggcctg   1920
aaagtgacac acaggcctgc atgtc                                         1945


<210> 452
<211> 599
<212> DNA
<213> Homo sapiens


<400> 452
gaattcggca cgagcgtcca cgcagccgcc ggccggccag cacccagggc cctgcatgcc     60
aggtcgttgg aggtggcagc gagacatgca cccggcccgg aagctcctca gcctcctctt    120
cctcatcctg atgggcactg aactcactca agactccgct gcccccgact ccctgctgag    180
aagttcaaag ggcagcacga gggggtcttt ggctgctatt gtcatctgga gggggaagag    240
tgagagccgg atagccaaga ccccaggcat tttcagaggt ggcgggacct tagtcctacc    300
cccaacacac accccctgagt ggctcatcct cccctttgggc ataacgctgc ccttgggggc    360
tccagaaaca ggcggtgggg attgtccgc tgagacctgg aagggcagcc agcgtgccgg    420
ccagctgtgt gcattgctgg cttaatatgc agggcttggg gggctgtggc cacatgcccg    480
gcaggaggtg agtgaggagc cctgtggcgt gctggtgtgg ggatcgtggg cattdaaac    540
gggcttgtcg taccctgaac aatgtatcaa tagagaaaaa aaaaaaaaa aaaactcga    599


<210> 453
<211> 978
<212> DNA
<213> Homo sapiens


<400> 453
ggcacgagca cttaatctca ggtgaacgca tcacttgcca aactgttgga atgctatttg     60
tgttttgttg cactgttttt ttcgtttgtt tgtttgttta tttggttggc tttttggaga    120
```

317

```
gggaaatttg gaaacgggac atacacaaaa gttacacacc cacattccct ttttatcatg    180
acatacaaga agaaactagc agagctaaga atggagtgaa gaaaggcagt atggcaggca    240
ccagcaaaga gttgagggct gttgctctta aaaattattt tttttattat tatttgaaa    300
gtatggaagt tttccattca ctggggaaag gagggaaaag tgcatttatt tttatacaga    360
gttacttaat tacctccaaa acacatatgt tggaaatcgc ttttgctggt gcaaagtata    420
ttaatgagca ggaatacata cattgaggtt atgaatagag agctcaattt gtaccttttgc    480
tgtcttgctc aagcttggta tggcatgaaa actcgacttt attccaaaag taacttcaaa    540
atttaaaata ctagaacgtt tgctgcgata aatctttgg attttgtgt ttttctaatg    600
agaatactgt ttttcattac ctaaagaaca atttgctaaa catgagaaat cactcacttt    660
gattatgtat agattacata ggaagaacaa tcacatcagt aagttatagtttatattaaa    720
ggtaattttc tgttggctca taacaaatat accagcattc atgatagcat ttcagcattt    780
tccaaggtac caagtgtact tattttgttg ttgttgttgt tgttgtattt tagaaggaat    840
tcagctctga tgttttttaaa gaaaaccagc atctctgatg ttgcaacata cgtgtaaaat    900
gggtgttaca tctatcctgc catttaaccc cacagttaat aaagtggctg aaaataataa    960
aaaaaaaaaa aaaaaaaa                                                 978
```

```
<210> 454
<211> 528
<212> DNA
<213> Homo sapiens
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```
<400> 454
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acagggacaa caaaacccac ggatgaaaca ttcctttctc agctcagatc ttatctggtg    180
cgttctctct ctgctctgtc ttggtgtgtg gtttagagaa acatggacaa cgctgtttgg    240
aagaacaggg cttcccagga atcaacaatg cccaagaagg aagggattgt agaaatagct    300
taccctttc atttaccaac gtggaaattg aagcccaggg aagggaaggg accggtcgtg    360
gaagggagag ccatcagcag aaagagaccc tgagatcttc gcctgggatt cccaggaagt    420
ccagcccgag ctgattcaca gaataaatgc atgcaaacct tgcatcaat aaattacaca    480
tgcacttacg taaaacacat aaaaaaaaaa aaaaaaaaaa aaaaaagg                 528
```

```
<210> 455
<211> 625
<212> DNA
<213> Homo sapiens
```

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<220>
<221> misc_feature
<222> (6)..(6)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc_feature
<222> (11)..(11)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc_feature
<222> (43)..(43)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc_feature
<222> (46)..(46)
<223> n equals a,t,g, or c
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<220>
<221> misc_feature
<222> (68)..(68)
<223> n equals a,t,g, or c

<400> 455
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ctagtggntc ccccgggctg caggaattcg gcacgagctc gtgccgaatt cggcacgagc   120
agcaacagca acacaggtgt ggagttgaca gacaggtaca ttgaaccaga gctgtgattt   180
agacaagcca ggaacctcat gtatgtccat aatgctgctg acattcactc ttcacttccc   240
cagcacatta ctgtcatatc tcccagagaa ttatgtcata ccttctctct tctcaaacct   300
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tccacttctg cactagattc cgtcctcttt tatcttccct acatcatgtg ttttccttct   540
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<210> 456
<211> 597
<212> DNA
<213> Homo sapiens

<400> 456
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tccatatatc cagccacact cattttaat atttagttcc cagatctgta ctgtgacctt   540
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<210> 457
<211> 665
<212> DNA
<213> Homo sapiens

<400> 457
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<210> 458
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<212> DNA

<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

<400> 458

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<210> 459
<211> 2466
<212> DNA
<213> Homo sapiens

<400> 459

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<211> 1739
<212> DNA
<213> Homo sapiens

<400> 460
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<210> 461
<211> 1139
<212> DNA
<213> Homo sapiens

<400> 461
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<211> 2648
<212> DNA
<213> Homo sapiens

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322

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<211> 3107
<212> DNA
<213> Homo sapiens

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323

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ctggccagtt tcatctttga cgttctctgt gctccaggta tgatgcctga ccctacagta   2520
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aatcaccttt aggacccatc aggcagcttc atgggtaggt ctgtgatgat gaggatttttg   2640
ggttcccctg tatttttttcc catgcatgat acttctgtct gcctgactta ccccaacttt   2700
tatacagtgg tttctcccac aggttccggg cccccaagtc gcaactggaa cagcgagaca   2760
cctggggatg aggagcttgg atttgaagca gcagttgctg ccttgggcat gaagacaaca   2820
gtgagcgagg cagaacatcc cctcttatgt gaaggcacac gtcgggagaa gggtgacctg   2880
gcattagcac taatgatcac ttacaaggac gaccaggcca agcttaagaa gaaaattgac   2940
cgggcatggt ggcgcgcgcc tgtagtccca gctactcggg aggctgaggt gggagaattg   3000
cttgagccca ggagtttgag gctacagtga gctataatca taccactgca ctccagcctg   3060
ggcaacagag cgagaccctg tctcttaaaa aaaaaaaaaa aagaaaa             3107
```

<210> 464
<211> 1466
<212> DNA
<213> Homo sapiens

<400> 464
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ggcacgagct ctacctgaat gttcccctag agtttcatac acaatgtgtt ggaaacctaa     60
atgtatcctt ctcctcagtt ttgtatttca gtgtgtggca tcatcaacat ttgacccccct    120
aggtagtgag agaccttgga gtcaacctca atgtcccatc tccttccctc tccttactac     180
agggtgttgt tggttctcta tgtcccgggt ctcttaaaac cacctcttct cctccgcctc     240
tacagacacc aacataaatc aagtttccat cttcgtttgc ctggacaagt ggcaaggcag     300
cactgaaagg atactccttc ctctagtctt ctctgccttt tgcctactga gcccactctt     360
ctgagctgct gataaaggaa tttacatacc acacatcctt tgatgggatt gccatgctac     420
aaagcagaac ctaaatccca tgcctggacg ttaggcagtc tacattctgg cttctgtgac     480
ttttggccta atttttgcat cagccccaaa tttctgttgt gccaccatcc cagtggattc     540
tagaatttag tcttacacaa tcattccata ttcctttaat gagtccttta gatttgttc     600
attcctttca tgtgccctat ccccgtacct ggaattactt ttcctctttt acttactcaa     660
gtcctgcaaa agccagttcc attatgctgg tctcactgac ctctttctac atatttctgg     720
taagaatgaa ttactttctc ctgaaatacc tctgccatat tgtttaaaaa ttgccatatg     780
gtgctggaca tgagtatgtg ttcacatgtt tattatctac tctagtctca atttctaagg     840
tcttgaatat aggaaccaat ttattcatca ccttattcca gacatgatgg aactcagctt     900
tattgagaat caagtgatta tagtagatag tgaccatcct gagtatgttc atgtgttaca     960
taacaatgtt ttggtcaacc aaggactgca tataggaagg tgggctata agattaatat    1020
ggagctgaaa aattcctaat gcttagccat atcgtagcca tgatattgta gcacaatgct    1080
ttactcacgc ggtgatgcta gtgtaaatgc tgccttacca gtcatataaa tgtatagcac    1140
aaggggccag gtggggtggc ttacacctgt aatctcagca ctttgggaag ctgaggggg    1200
aagattgctt gagcacagga atacaagtct agcctggtta atgtagggag ggcacgtttc    1260
tacaaaaact aaataaaatt agcctggcat ggtggcatgc acctgtagtc ccagctactc    1320
tggaggctga gacggaagga ttgtttgagt ccctggaggt tgagctgcag tgagccatga    1380
tcatgccact gcactccagt ctgggcgaca gagcaatccccttttttcaaa aaaaaaaaaa    1440
aaaaaaacaa aaaaaaaaa aaaaaa                                        1466
```

<210> 465
<211> 566
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 465

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ntcttgtgcc aggcactggg atatggtgcc gaattggata caagggagat gggacgtcct    60
cctgtgtgtc ttgactgtcg gtgtgttgcc gagcattggt agcagagggg gctggtttgg   120
cacccaggta ccctgcctca tccccggggc cttggccagt ctacacagag gaactgccct   180
ccagctgagt tacccatttt ccatggcagg gaggacagca gaaggccgt gttccatgac    240
taatcatagc ttccatctat tgagcattta ctgggagctg ggcactgtgc taagtgtgaa   300
acgtgtgttg actcatttac tacaacaacc tggcaaggca ggttcttccg ttagcccctg   360
ctcaaagcta ggggacctgg agcacaggcg gtcaagtgct tggctcaagg cacacagctc   420
agaagtgcag atcctctgcc cctcctggca tcccagtctg gggggtcag gggtgggatc     480
tctgcagtca gtgcctgggg gctggatgac aagctgcagc ctccccgcaa ccccacgatt   540
tccatagcgc agtggagcca gaaaga                                        566
```

<210> 466
<211> 1274
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (722)..(722)
<223> n equals a,t,g, or c

<400> 466

```
agctgagtgt gcgagcgcca ggggttccag ctgcacgtcc caggctctcc agcgcgcggc    60
aggccggggc gggacgagga gagctgcggg gacaacgcct gtggctgggt ccggagtgcg   120
ggtgcggcgc gggacaagcg ggcagcatgc tcagggcggt cgggagccta ctgcgccttg   180
gccgcgggct aacagtccgc tgcggccccg gggcgcctct cgaggccacg cgacggcccg   240
caccggctct tccgccccgg ggtctcccct gctactccag cggcggggcc cccagcaatt   300
ctgggcccca aggtcacggg gagattcacc gagtccccac gcagcgcagg ccttcgcagt   360
tcgacaagaa aatcctgctg tggacagggc gtttcaaatc gatggaggag atcccgcctc   420
ggatcccgcc agaaatgata gacaccgcaa gaaacaaagc tcgagtgaaa gcttgttaca   480
taatgattgg actcacaatt atcgcctgct tgctgtgat agtgtcagcc aaaagggctg    540
tagaacgaca tgaatcctta acaagttgga acttggcaaa gaaagctaag tgscgtgaag   600
aagctgcatt ggctgcacag gctaaagcta atgatattct aagtgacaaa gtgttcacct   660
gaataccatc cctgtcatca gcaacagtag aagatgggaa aaatagaata tttaccaaaa   720
tntctgccat ggttttattt tggtaacaag aagcacaatg tctttttat ttttatttt     780
tagtaaactt ttactgaagt ataccatgca ttcaaaaagt ggacaaaact gtatacagtc   840
tgatagatat ttatgtcgtg aacacctgtg taaccactgc caaagtgaag atgtagaata   900
ttggcaacac ttcacagcct cattcctgcc ttttctcagc cattacctcc caaacatgc     960
agtttttctg agtttcatca cctttgattc attttgcctg tttttgaact ttatataaat   1020
ggatttatac attatgcact tgtgtgtgtg gattatttac ctgacagtta taaggttaat   1080
ccacaaattg tgtgtaccat tagttcatcc attgtcattg ctgtattctg ttgtataaac   1140
ataccacaat ttattttgat atttggcaca gtttctggcc actacatata atgctaaaat   1200
gagcacattg tatatgtcat taaaatgagg ttgaactaaa aaaaaaaaa aaaaaaaaa      1260
aaaaaaaact cgag                                                     1274
```

<210> 467
<211> 1217
<212> DNA
<213> Homo sapiens

<400> 467

```
cggcacgagg ttgaatgtta gccctggagg agatccatgt cttactcgct ctttctggcc    60
cttctgtctt ttgcctctgc aattcttttt gtagctggca cgatagcagg gactgggggt   120
ctatcctttc atggtattgc tacaatattt gtccttactg gaaaatggta acatccgggt   180
ctgatttaat tggcattaca cttacacagg gactctgagc accccgtca ccacaccaga     240
```

325

```
cagtggacca gttttcacag ctacaaagag ctagaaatgt gtttaacatc atccagtgca      300
tcccctaatt caaaaccatc ctcactaatc aatcatattc acccataaat attacaaatg      360
agattgattc catctcaaga caatttgtca aatacttaat tttcttcctg gtgattcta      420
cttactggat attttagaaa gagaaatgtc tgagataaaa tccctcacat ttactcaata      480
taacaaatta ctgtttctac tcctattctg agtagtgctt ctgaagattg tttgctgtag      540
tgttgtcttt gataaaatga atgtcagtag tgagcctttt agagatacca tgctcagaaa      600
tcctctttgg gatcagaaga tacctaaaat tctccccttt tgcccacttg gttagatgag      660
tgatatattc tttggatcct gcaaagaaga gattggtttc ttttcttttc tggtggtggt      720
agtggttgta tctgtggctg tgatggttgt tgttacttgt ctctctctct ctctggctct      780
ggcttttgct ttcctgctag tgttctttct ctttccaaac aaatagtaa attaaacgtg      840
agcttctgaa ttgtacttgt tcatactttc aaaacataac agattaataa aaatagatgt      900
gtcctgattt aaaacatgcc ccctggaaag gcatgctgta ttatgaaatc atgataatat      960
aactgcatta ttacatggca gtataaatat tagtctgttg aattcatttg tccaattgta     1020
taactttgtg gagcagtgtt ttgacctttg atacataatt ctggagcaag tggagtggtt     1080
gcaggcagat gagacagtgt tatatcagga ttttttcaatc aactttagtt ggaggcctgg     1140
caattacaaa catcttcaga tgtttctgta accattataa atatgaaaaa aacctcttca     1200
aaaaaaaaaa aaaaaaa                                                     1217


<210> 468
<211> 1656
<212> DNA
<213> Homo sapiens


<400> 468
ggcacgaggt tcacagcacc tgatttgcaa ggcagctata caagttcctg gactcttgta       60
gttccggagt gtttcacctg accttaagcc caccccatcc atctttaatc aagaaaccat      120
gtgctttccc gcatgcctgt gttcccccct cacgtgtctg ctgtctgtgt ggaagcctgg      180
cctggcgcat gctgtggtgc actgcatgct ggaacccgtg gagtttgcac gcgtggtaca      240
gtatgaggcg ggtcacgttt tgtagtgtgt gccgtgggct cccgagaaac aagttaaagt      300
gtgtgctgaa atagatttta ttgacataaa ataagcctta ttgctaaatt taagagaatg      360
tgttacaaat gttttttgct aaacatcagt attgattatt ctacatgatg tacttattga      420
cataacaacc tgaaattctt gattttagac aatttctcct caagttgatt cagctgcatg      480
actctcagaa atcagtcatt ttttattgta gattgctggt tttcttcctc tagtttgtat      540
cgtgtatttt cctcctgtgg agaaaatgtg gttggcaaga aatgccatat tttaaagctg      600
tatcgtggct gttaatgcag aaaacaccag tgtactgcag gctgtttggc agtggggctg      660
gggctgagtg tcctgccctc agtggcctgt gtctgtgctc ttgttcgctg acatgcagat      720
acaggggcag atctgagggt ttgatggagt gcagaggcc acacgtgtgg ctttctgtaa      780
atgcagaaac atggaatcct tgagcagaca cttgtcttct ggagcacctt gcatggattt      840
cgcctcctga tgcttcattg ccgttaatag agtggtggtg gttgtgttat gagaaatttt      900
gtctaacctg gcttctgaaa.tttctcaaac taaatattca tgctgttttg tgtttttctt      906
aatgactgag gctagtgata ttactcagaa aagtaacagt aacttgggtc ttctgagcgt     1020
caggatgttc accatttaac ttgtttctcg ttagtgtcta gtacgtcggc tttcggtagt     1080
gtaggtgtgt gttctgtgtc ctttcccgtg tgtgcctgca ctagtggcag cctctgcttc     1140
caggtcagtt tagagtagac tggctctgg attgctagca agtagttgct gttacccagt     1200
gtagccatga agcccagctc cttggatctt gacatatatg ttccaggcaa agtacgtaat     1260
ccagacgttt ctaactcttt ctagatgatt gcaattgttc tccatgttgt ctgttaggcg     1320
ttatgttaat tctcgatcta acagtgtgcc tgtaacatat atggtagtga agagacatca     1380
catgcagaga ccgtttcct tttatcaact acaggtccgc tatcgacgag agcacctttc     1440
tgctaggcag tcaccctact tcccgttgtt ggaggatttg atgagagacg gcagtgatgg     1500
tgctgctctc ttagctgtga ttcactatta ttgcccagag cagatgaaac tggatggtga     1560
gtggagaatg cttcctgaaa cagatccgaa aaggcttaaa ggaaaattat agtgtacatt     1620
gatccacata tatattaaaa aaaaaaaaa aaaaaa                                1656


<210> 469
<211> 990
<212> DNA
<213> Homo sapiens


.
```

<220>
<221> misc_feature
<222> (834)..(834)
<223> n equals a,t,g, or c

<400> 469
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ttggaaaggg tctagctctt tctcattcac caactatatt agaagcactt gagggaaatt      60
taccactcca aatccaaagc aatgaacagt cttttctgga tgattttatt gcctgtgtcc     120
caggatcaag tggtggaagg cttgcaaggt ggcttcagcc agattcatat gcggatcctc     180
agaaaacatc tttgatcctg gaataaggat gatattcgtt gtggttggcc taccaccata     240
actgttcaaa caaaagacca gtatggggat gtggtacatg ttcccaatat gaaggtaatt     300
ataactggat taaattagca gacatctata tactggctgc aatgactgat aaaattttag     360
aaatgccaag tgctgagrgt ccatttgttc taccctcttt atataaaggg gatgctgaa      420
agtttgttta aatgacttgt ttatattaat tagtccccaa gtgtccaagt tacacctgtt     480
tttttgtga gtttgttctt tacattttgc tacctgttac ggggactcaa aggagggata     540
agaaagtatc catctaaaga gtgctagaca catacagtga agcccctcaa tatgtattga     600
ttgaataaat gcatgaaaga atacattttt aaattttgtg tatagttttg aaagactcaa     660
gtacgttctg tgtttggtat tactgaaacc acattttaaa aataacactc attaagttag     720
aaatatatga gtttagattg taaaagaatg aggaattgaa atagttgtat accatattga     780
tgaatataga gttttttagga tacctcttac ctgaaatatt aataatatg tttncagagc     840
atattataca taattatttg tgatttaatc tgttaatatg aatatctcat ttaaaacttt     900
tatttctgaa aaaattatat tgaataaaat tttatatagg cagtccccag ccctttcctc     960
cttcaaagtt gtcttataga gtgattggtt                                       990
```

<210> 470
<211> 2543
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2538)..(2538)
<223> n equals a,t,g, or c

<400> 470
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ctccgttgga aacttgggct gagtaccgcg gcgggcgcga gcraggcgcc ctagacatct      60
tctccctccc ttgcctcaga tttattgcta aacatgggtgcattttggga taaacccaaa     120
actgaaaaac ataatgctca tggtgctggg aatggtttac gttatggcct gagcagcatg     180
caaggatgga gagtggaaat ggaagatgca cacacagctg ttgtaggtat tcctcacggc     240
ttggaagact ggtcattttt tgcagtttat gatggtcatg ctggatcccg agtggcaaat     300
tactgctcaa cacatttatt agaacacatc actactaacg aagactttag ggcagctgga     360
aaatcaggat ctgctcttga gctttcagtg gaaaatgtta agaatggtat cagaactgga     420
tttttgaaaa ttgatgaata catgcgtaac ttttcagacc tcagaaacgg gatggacagg     480
agtggttcaa ctgcagtggg agttatgatt tcactaagc atatctactt tatcaactgt     540
ggtgattcac gtgctgttct gtataggaat ggacaagtct gcttttctac ccaggatcac     600
aaaccttgca atccaaggga aaaggagcga atccaaaatg caggaggcag cgtgatgata     660
caacgtgtta atggttcatt agcagtatct cgtgctctgg gggactatga ttacaagtgt     720
gttgatggca agggcccaac agaacaactt gtttctccag agcctgaggt ttatgraatt     780
ttaagagcag aagaggatga atttatcatc ttggcttgtg atgggatctg ggatgttatg     840
agtaatgagg agctctgtga atatgttaaa tctaggcttg aggtatctga tgacctggaa     900
aatgtgtgca attgggtagt ggacacttgt ttacacaagg gaagtcgaga taacatgagt     960
attgtactag tttgctttto aaatgctccc aaggtctcag atgaagcggt gaaaaaagat    1020
tcagagttgg ataagcactt ggaatcacgg gttgaagaga ttatggagaa gtctggcgag    1080
gaaggaatgc ctgatcttgc ccatgtcatg cgcatcttgt ctgcagaaaa tatcccaaat    1140
ttgcctcctg ggggaggtct tgctggcaas cgtaatgtta ttgaagctgt ttatagtaga    1200
ctgaatccac atagagaaag tgatgggggt gctggagatc tagaagaccc atggtagcct    1260
```

327

```
taaaaacctt ctaaaatgct tttrattctg aaaattgggg gaaaaaactt ttaatcacaa    1320
ttttcttcaa tacaaggga aaatattctt gcggattccc aacgttttgt gatatgagca     1380
gaaaatcatt agcatttccc atcatttgtt catatttgtg ttttctgaca gttgccactt    1440
gtagcattgc ctgtactaca gtattttttg ccaacctcag gcatactcgt tacatctgta   1500
ttgaactttc ggccctagaa accagtggag ttatttcacc acaaatcaac aatgtcctg    1560
aggtgcatgg gaaatatagt tagctatact ctgaaaatac attatgtttt ttttctttaa  1620
acaaaacaca caacatgtaa gcatgtaaga gtaaagaatt gtatgatatg ttcctttttt  1680
cagttcacca agttggaagc cttttgcagc tctgtggctt ggaatttcat ttgagcaatt  1740
tctataggat atgtatttat tattgattgt tatttaawww wwttccamtt ttacctgtat   1800
taccaaactg ggttctccaa taatgtccaa attgtaatgt tgccttgctt caagataaag   1860
tgtatttggg aataatatta taaaccttm caaatttat gcatgtatct actgcatcct    1920
tcaactctca ctagaaaatc ttttgaaacc aaatggatta atttatggctatttataatt   1980
tgctttgaca tctcactgtt ggaaattttt taaagatgag atttgccttt ataatgtaaa  2040
ttgtgatttt tgttttacat gtgggtttct atagttttaa tttttttcagc ttttaagata 2100
cgagttttgt gtaatttggt atttttaatc atttatgtta ttttaaaagc tcagaatatc  2160
acattgaaat tactataaat acatttaaaa ttatctattt tagatctaag gaaatactac   2220
agagatattt tcatgggttc agtaacttt cattttataa cattgggcac ggtacagagt    2280
gattgtcaca taaggtactt gaagatttat tagtttaatt ctattttac agtaaccttg    2340
aattcttctg agttttgcat gtattaaatt caattaatgc tgaaatgaa gagtaaagta    2400
tttatctgaa agaagtttct gggttaggag aagtaatgaa tgtatccatt tgtacatggt   2460
ttacatgttg tggatgcttt gtaaacattt tcctgtatgt ttaaattgtg tttcagcagg   2520
atgtagttgc ccttgtgnag gtt                                           2543
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<210> 471
<211> 1461
<212> DNA
<213> Homo sapiens

<400> 471
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aattcggcac gagccaaatg attatccttt taatcatgtt ctactccaaa aatatcagcc     60
tgatgatgaa tttccagcct ccgagcaaag cctggcgggc ctcacagatg atgactttct    120
tcatcttctt gctctttttc ccatctttca ccggggtctt gtgaccctg gccatcacca    180
tctggagatt gaagccttca gctgactgtg gcccttttcg aggtctgcct ctcttcattc   240
actccatcta cagctggatc gacaccctaa gtacacggcc tggctacctg tgggttgttt   300
ggatctatcg gaacctcatt ggaagtgtgc acttcttttt catcctcacc ctcattgtgc   360
taatcatcac ctatctttac tggcagatca cagagggaag gaagattatg ataaggctgc   420
tccatgagca gatcattaat gagggcaaag ataaaatgtt cctgatagaa aaattgatca   480
agctgcagga tatggagaag aaagcaaacc ccagctcact tgttctggaa aggagagagg   540
tggagcaaca aggctttttg catttggggg aacatgatg cagtcttgac ttgcgatcta   600
gaagatcagt tcaagaaggt aatccaaggg cctgatgact cttttggtaa ccagacacca   660
atcaaataag gggaggagac gaaaatggaa tgatttcttc catgccacct gtgcctttag   720
gaactgccca gaagaaaatc caaggcttta gccaggagcg gaaactgact accatgtaat   780
tatcaaagta aaattgggca ttccatgcta tttttaatac ctggattgct gattttcaa    840
gacaaaatac ttggggtttt ccaataaaga ttgttgtaat attgaaatga gcctacaaaa   900
acctaggaag agataactag ggaataatgt atattatctt caagaagtgt gtgcaggaat   960
gattggttct tagaaatctc tcctgccaga cttcccagac ctggcaaagg tttagaaact  1020
gttgctaaga aaagtggtcc atcctgaata aacatgtaat actccagcag ggatatgaag  1080
cctctgaatt gtagaacctg catttatttg tgactttgaa ctaaagacat cccccatgtc  1140
ccaaaggtgg aatacaacca gaggtctcat ctctgaactt tcttgcgtac tgattacatg  1200
agtctttgga gtcggggatg gaggaggttc tgcccctgtg aggtgttata catgaccatc  1260
aaagtcctac gtcaagctag ctttgcagtg gcagtaccgt agccaatgag atttatccga  1320
gacgcgatta ttgctaattg gaaattttcc caatacccca ccgtgatgac ttgaaatata  1380
atcagcgctg gcaatttttg acagtctcta cggagactga ataagaaaaa aaaaaaaaaa  1440
aaactcgagg gggggccccg g                                           1461
```

<210> 472
<211> 559
```

328

<212> DNA
<213> Homo sapiens

<400> 472
gattcggcac gagctgaagc cctgggtgcc actgctggcc cagcagggag gaggttgctg      60
ctgctcgggc tgaagtgagg tgtgggtctg gctgggcctc cagtttccca cctgggcctt     120
gattgtgagg aaggcctggc ctggctgcag aagcccagaa gcacctgagt aggagagttc     180
ctttgtccca cctgcagctc attcaagcct gtgcatgggg gttgggggtcc tcaggatctt    240
gctttcctgt ttaggggagg cagcccaaaa gagtgctggg accagtttgg agagtgctaa     300
ggaatgctgg tctgcagcga ccctacttgt gctctgcgtc ctctgccaac tgcagcatgg     360
gtgaacatct gtacatctgt ccccataatg aaaatggcct cagcaaataa caaaaatatt     420
accatttagc aatcaggcac ttattaaaag cctggcccaa taaacttaaa aaaaaaaaaa     480
aaaaactcga ggggggcccc ggtacccaat tcgccctata gtgagtcgta ttacgcgsgs     540
tcamtggccg tcgtttaca                                                  559


<210> 473
<211> 803
<212> DNA
<213> Homo sapiens

<400> 473
ggcagagcta ggccaggcag agcctagctc ttgccagggc agcaggaagc cacacagtgt      60
gttgaagccg gagcaggaga gggggccctg actcccatgt gtccttgcag gcaggagcag     120
ttcgtggact tgtacaagga gtttgagcca agcctggtca acagcaccgt ctacatcatg     180
gccatggcca tccagatggc accttttcgcc atcaattaca aagtaaggcc tgggccactc    240
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tgggcgggaa ccccaacagg gccccgggag ggaaccctgc ccccaacccc cacagcaag     660
gctgtacagt ctcgcccttg gaagactgag ctgggacccc cacagccatc cgctggcttg     720
gccagcagaa ccagccccaa gccagcacct ttggtaaata aagcagcatc tgagatttta     780
aaaaaaaaaa aaaaaaactc gag                                            803


<210> 474
<211> 819
<212> DNA
<213> Homo sapiens

<400> 474
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ctgattgcgt tttattttcc cagctttaga aaacatatag atagcctctg ttgggaactt     300
atattctcgt tactccttgt ctcttttctt ttttcaggaa ttggtcactc tttcagccaa     360
ctcgtaggtt caaacaatgt ttacatgtag tgctcagttt gttttaactt cckgctgtag     420
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aggcaagtcc catctattac tacgtactta caaatccagg tgaaagtgct tggtaacag     540
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gttcaattgt taaactatgt ttggatttga ggtctgaatg agctgaattc aaaatatggg     660
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<211> 1414
<212> DNA
<213> Homo sapiens

<400> 475
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attttgctct gcttgtgcaa ttttttccac cctccatctc tgtcaaacgt aagccttcct   180
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aagtagatat tacaatatct aacttacaga gtcattggga gctatacatg cagcgattgg   480
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caaggatttt ggataaagga tactcaatgt gcaacatgta gaatggtggt tgcaaggtgg   1200
gaggagagaa tggagagtta ctgtttaatg atacaatgtt tccgtttggg aagatggaaa   1260
gttttggaga tgtgtgatgg ttatggttgc gcaacaatgg gaaggtactt agtactgctt   1320
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aagaagtttt ttaaaaaaaa aaaaaaaaa aaaa   1414
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<210> 476
<211> 1340
<212> DNA
<213> Homo sapiens

<400> 476
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ccccctgtaa agatgcaggc tctttacaat gaagacacat cttctgatgt tccttctctc   180
ctgtatggcc agatgcacag gaatagtgcc caaaagacct cagcctgctt tcccttttaag   240
gggaaggaga agaaaaaact ccttttttatt tttactttct ttcagcattg aatttttgtt   300
gtgtgtatgg tgacttctgt ttttgggaaa cggaagaagc cagcagcatg ctgaattgtc   360
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actagacata cggcaattag gaagtcatgg agttgggatt tttgtcttaa ttttggctgc   660
tcaaagtgcc ccctgtagga tattcttttt tcgggaattg tttccaaact tgcctgtctt   720
tatctatggt gaaactcaag ccgcttttta aggcaagcct gcaaacccaa gtatcaacat   780
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gaggccgagg tgggtggttc acgagctcag cagatcaaga ccatcctggc caatatggtg   1140
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cccagctact cgggaggctg aggcgggaga atcgattgga cccaggaggc ggaggttgca    1260
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aaaaaaaaaa aaaaaaaaaa                                                1340


<210> 477
<211> 1676
<212> DNA
<213> Homo sapiens


<400> 477
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ttcttaaaga agaaaaaaac ggggaaggag gtaagtgtta aaggatcaaa actctgacaa     180
aaggctggtt gcagaacatg acaggttgtt gcactggaaa ctatttgtca tgcaagttta     240
tgttaaaata agtagctttt gaggactttc atttttggtc ttgtaaaat gccatttaat     300
attgtccmac tgataatact ttttgcaaac agaaactgtt aaaacctta aagcaaatat     360
tactgtagag aagaagtaat gtgttatgaa actgtgagga tactaagaag gatcctactt     420
aagtttcttc agcataaata aacttgagcg tttcgaccac tgttactgag aatgaaatta     480
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tatagtttaa tgagcttgca cagatgtaaa tatctgttta acttctactt aatcaagata     600
tagaatattt ccacaatgcc aaaattgcca ttgaccccct tccccttctt tcacccaact     660
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tataggtact ttgaaaatct gtgctttgcc tttacatttt tttaatggta actttttaag    1440
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actagaaata ttatagtttt atttaccatt gcttctatga tacattttaa gttaattttt    1620
gtgtattaaa tgaataaaaa gttgaagttc aaaaaaaaaa aaaaaaaact cgtagg        1676


<210> 478
<211> 1747
<212> DNA
<213> Homo sapiens


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cagtttcacc gtgccttcca ccaagggcat cgggctggcg gcccaagaca tcttgcataa     180
caacccgtcc agtcagagag ccctctgcct gtgcctggta ctcctggccg tgctcggctg     240
cagcatcatc gtccagttca ggtacatcaa caaggcgctg gagtgcttcg actcctcggt     300
gttcggggcc atctactacg tcgtgtttac cacgctggtc ctgctggcct cagccatcct     360
cttccgggag tggagcaacg tgggcctggt ggacttcttg gggatggcct gtggattcac     420
gaccgtctcc gtggggattg tccttataca ggtgttcaaa gagttcaatt tcaaccttgg     480
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aggaataggc attggaggtg gtttctggcc gtgattggat gtgaagtaga agaggtcctc     600
gatcatggtg ttagaattga ctggaagta acaggtggtc tggtggatag cggggagcat     660
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tcatgactgt atattcactg gaagatagtc aagactaaag acacataga gcaaattgac        1680
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aaaaaaa                                                                  1747


<210> 479
<211> 1251
<212> DNA
<213> Homo sapiens


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gctcctgact cgcactgggc agcatgacgg tgcgccggct gtcactgctg tgccgggacc        180
tctgggcgct gtggctgctg ctgaaggccg cgcagtacg tgggcgcgg gcaggtcctc         240
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agtggggccg cctctgccct tggcctgtga gggactgtct gtgctggtcc cagaaggctg        540
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<210> 480
<211> 1539
<212> DNA
<213> Homo sapiens


<400> 480
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cagcccragg aagggaccca ataacctttc aaacscaaa ctgctkcctg cggtgagggc         180
ccagggtcct ccacggagag gacaggcatc ttcctttccc accaggaagg agtcagcccg        240
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332

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<210> 481
<211> 1941
<212> DNA
<213> Homo sapiens

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atgcaggagg cacactccgg ggtcagcagc atccacagca gcatccgcca tgtcccagca   180
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taaacgggag agggcattgg c                                             1941


<210> 482
<211> 1510
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (426)..(426)
<223> n equals a,t,g, or c


<220>
<221> misc_feature
<222> (454)..(454)
<223> n equals a,t,g, or c


<400> 482
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gcctgtcaag aagatattta actatatgat acatgtgaat cgaaacatca tggatttcaa     180
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tgtcttgctg ttggtgaaaa gattcatccg aagtatagca ccttттgggg ctctaatggt     360
tggttgttgg tttgcctcag tttatattgt atgccagttg atggaagatc tgaagtggct     420
gtggtntgaa aacaggatat atgtatcagg ctangtcttg atagttggat ttttcagctt     480
tgttgtttgt tacaagcatg ggccccttgc acacgacagg agcagaagc ttctgatgtg     540
gatgctgcga ctcctctccc tggttctggt ctatgctggt gtggctgtgc ctcagtttgc     600
ctatgcagcc ataatcctcc tcatgtcctc ctggagtctg cactacccac tgagagcatg     660
cagttatatg aggtggaaaa tggagcagtg gtttacatca aaagagctgg tggtgaaata     720
tcttacggaa gacgagtaca gggagcaagc tgatgctgaa acgaacagtg ctctggagga     780
gctacgccgg gcctgccgaa aacccgactt tccctcatgg ctggtcgtct ccagactcca     840
cactcctagc aaatttgcag attttgttct tggaggaagc cacttgtcac ctgaagaaat     900
cagtctgcat gaagagcagt atggccttgg gggtgccttc ttgaagagc agctctttaa     960
cccgagtact gcctgacatg cgaccttcaa gttgacttca ttctggacaa ggaagtgggc    1020
aaagggcagg attctattaa agttaggcag aactgttcta gtgaacggtg gcaaaaacat    1080
ttgctgtgga gaaaaacaag tcagtctgga aaggaaaacc aacccatttt gaagataact    1140
tagcattctt ggtgacttct gctacttatt gtactgtagg tggataccaa aattctgtga    1200
cagccactac cacttacctt gaatgaaggc tttcattagg aacaggggaa tggcgttgtt    1260
cttaaggggc tagtaagcat gaacaggtgc tttgtcgaca ccagggcact aaatctggtc    1320
ttaatccccт gaacctgtgt cagaagactc tgcaatacc ttcctatagt tcgtcagtat    1380
aagtccttaa agagacctga gacatgctgg accagtgttt tccaaagtac agctcacagg    1440
ctactaccaa gtgttggtca ataaaggtat tctgaggtca actaagattg ataaaaaaaa    1500
aaaaaaaaa                                                          1510


<210> 483
<211> 805
<212> DNA
<213> Homo sapiens


<400> 483
ggcacgaggt ccctaattgt cttgtaccta gccctagggt gaccagggca ggggaatcat      60
ggcgagaagc gtaagggcct gatgaagaag gtgtgctggg tgtgggctct agcccacttg     120
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334

```
gttttgtgtg agaggtggct gacagcaggt tgtttgctgt atgtaggagt tatccagccc      180
tgcaagggca gtccctccag tgtctgcaaa gcccgaagat gtctgcatcc aaaatacaga      240
ataaaaagat atggttacta caagtactca gtaagactga taatctgtca tcatcatcct      300
catgccctta aagcagagct aactgatgat taatatatgc ttctatgtta acagtcttgg      360
actttattaa tggtgggtgg aagttaactt aatgtatgta tgcaaactaa aaagtggcat      420
ccttttcatt aatgacccaa ccattattca agagctatgt ctagttaggg acttcagact      480
tttgaaagaa atgaagaaat aatgccagat acatgggctc gcacttggaa tcccagctac      540
ttgggggacc gaggtgggag gaccgcttga gccaggagt tcgagaccag cctgggcaac      600
atagcgaaac cctgcctcag ttttaaaaaa gaaaaaaaga agtagtgaag aaattggaaa      660
ggattctgag aagaaatatg caaggtggaa aagagcctag aaagaaaggt gacagatgct      720
gggatttggt cgtcagaaga gatatctagg aaatagcatg gcagccctca agtactagct      780
ccacttaaaa aaaaaaaaaa aaaaa                                            805


<210> 484
<211> 1182
<212> DNA
<213> Homo sapiens


<400> 484
ggcacgagcc cccagcacat ggaagccctg ttacagtccc tcgtgatagt cttgcttggg       60
ttcaaatcct tcttaagtga agagctgggc tctgaggttt tgaacctact gacaaataaa      120
cagtatgagt tgctttcaaa gaaccttcgc aagaccagag agttgtttgt tcatggctta      180
cctggatcag ggaagactat cttggctctt aggatcatgg agaagatcag gaatgtgttt      240
cactgtgaac cggctaacat tctctacatc tgtgaaaacc agcccctgaa gaagttggtg      300
agtttcagca agaaaaacat ctgccagcca gtgacccgga aaaccttcat gaaaaacaac      360
tttgaacaca tccagcacat tatcattgat gacgctcaga atttccgtac tgaagatggg      420
gactggtatg ggaaagcaaa gttcatcact cagacagcaa gggatggccc aggagttctc      480
tggatctttc tggactactt tcagacctat cacttgagtt gcagtgcctc ccccctccct      540
cagaccagta tccaagagaa gagatcaaca gagtggtccg caatgcaggt ccaatagcta      600
attacctcaa caagtaatgc agaagcccga caaaatcctc cacctaacct ccccctggg       660
tccctggtga tgctctatga acctaaatgg gctcaaggtg tcccaggcaa cttagaagtt      720
attgaagact tgaacttgga ggagatactg atctatgtag cgaataaatg ccgtttttctc      780
ttgcggaatg gttattctcc gaaggatatt gctgtgcttt tcaccaaagc aagtgaagtg      840
gaaaaatata aagacaggct tctaacagca atgaggaaga gaaaactgtc tcagctccat      900
gaggagtctg atctgttact acagatcggt gatgcgtcgg atgttctaac cgatcacatt      960
gtgttggaca gtgtctgtcg attttcaggc ctggaaagaa atatcgtgtt tggaatcaat     1020
ccaggagtag ccccaccggc tggggcctac aatcttctgc tctgtttggc ttctagggca     1080
aaaagacatc tgtatattct gaaggcttct gtgtgacagg aaacccaagc taagaaaca      1140
attaagtggt tctcatctct aaaaaaaaaa aaaaaaaaaa aa                        1182


<210> 485
<211> 600
<212> DNA
<213> Homo sapiens


<400> 485
agaactagtg atcccccggg ctgcaggaat tcggcacgag gacctctgac catcaggctt       60
ctgggaacca taggctatac ccacaccaca gagcatcgat aaactatttt gatgtttctc      120
ttgctttcag aaagacagct tccaagattc aagcccaggt ggtgccggtc ttttttttgga      180
ggtgctaatt aataatttaa cttcatctaa tgataatttt atcttgttgc agtttgtgga      240
tttatgatta tctcatccat ccggtgccta gtgttgggca tagagtgtgt tctgctgtc      300
tgccagaatc tgctactggg agaatttccc cactgggaga gggacccagg aaatggcatg      360
gtcttagaag gtctcctgaa cacatttcct tgggagggct cctgttatct tcaaggttga      420
tggctttctg caatctctca agggctgttt tgcctggaaa caggacgatg gagacagaga      480
cctatcagct gtgggcatct caatatcagc ggaaatgggt atcaagaagt ctcagccagg      540
tgcagtgctt gcgcctgtaa tcccaacact ttgggaggct gaggtaggta gatcactcga      600
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335

<210> 486
<211> 777
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (274)..(274)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (278)..(278)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (295)..(295)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (676)..(676)
<223> n equals a,t,g, or c

<400> 486
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ggcagagctc aggtaagarg caaaattact agaatattca ctctcactga aaatgagtaa      60
aaacctaact tagatgaaaa tccttatctt gttcattttt attcctggcc ttttggttga     120
gaagaatggg ccagaccatg tgtgtgtgtg tatgtgtgtg cgtgtgtgtg tgtgtgcgca     180
cttgggttta tttatatgag ccggtaaaat ttcgtcacc attaatttat gttaatttac     240
caacttctta aatgagaaca gtgagaattt tctncatngt taataataca ctggncagtg     300
catatatgca tcacgaagag aggattttcc cattgataat agatttccaa atacatcttc     360
ctgctttaag attttaatat atggatttat atataaaaac tagttaagtc attggaaaag     420
caaactgtca wccttctctt atttgagawc tcaactttag aaagtctatg ttctcaacta     480
cagaaaataa tttttagacc agctaacttt cagatttctg cagtgcttat tttctcccag     540
ttgagggttg gtttttgttt gtttgtttgt ttgtttgttt ttcctgatta aaaagtaaga     600
atacggccag gcgcgatagc tcatgccttt aatcccagca ttttgggagg ccgaggaggg     660
cagatcacct gaggtncagg agttcgagac cagcctggct aacatggtga aacccagttt     720
ctactaaaaa aaaaaaaaaa aaacttcgag gggggtccc ggtacctaat cgtccct        777
```

<210> 487
<211> 1037
<212> DNA
<213> Homo sapiens

<400> 487
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cggcacgagg tgatacttct gaagactgca gggagaatcc gttttccagc ttttttcatc      60
caccagaggc cacctgtatt ccctatccca caaccctagc cccttcctct atctttgaag     120
tggactattt catcccctgt ttctatcatg acagtgcctt ctctcatatt gaccctcttg     180
ccttataaga ttccttgtga ttacactggg tccacctgca taatcaaggc taatctctcc     240
atctggagat cttaatataa tcacatctac aaagtccctt tggccattga agtaacatat     300
ttatatgtat tcattattag gatgtgggac acttttgtca gggacaggga tttttcagcc     360
tacctttttc ttcacctttt gccaccactc tcagcctgtg gtctcaattg ccagccttta     420
cacttgctac cccattgtct gggtagttca taccagtcct caagactagc ctcaggcatg     480
cctcttctgg gaatacatcc tcttacaggc caggatatga ctcatgggtg catcctaata     540
gcacttcact tatttctact gtcaccacac tgatctgtaa ttacttgatt tgtctgactc     600
ttctgggggc ttgtaagcat tctggcacag agaactatga cttactgggg cttacatctc     660
```

336

```
ttgctaaaca cagtacctaa aatttagtag gcattccctc ataaacatga atgaatgaat      720
caaagaatga ataaacattt aggaaatgat gttgtgttgg tcaacttctt tcctcatcac      780
tgttaaagat aaaagaatgc caagccaggt tgttcagaca gaagcaagca ccaatccct      840
gagagagcag cacatctggg cagccatgtg tgagaagtcg gttgcattcc ccatacacag      900
ttgtctttgc agctgtactc ttaaccactg taaccacaga agtggggaaa caatagggtg      960
gggtgaagtg aaaagaaaat tttccaaaac ttcatttatc taataaatac agatatttaa     1020
aaaaaaaaaa aaaaac                                                      1037
```

<210> 488
<211> 727
<212> DNA
<213> Homo sapiens

<400> 488
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gaattcggca cgagagggtt ttagtttatg tctctaactt tagcaaagct gcattcctat       60
tggaatgcat actggaaaca gctctcattc ctacctttaa agggctcttg gaagcagtg      120
tgacaaccaa ggtcactaaa tggtgagatc atcaagccat tttaagttct ttctcatgtt      180
attcaccagc accctgcagg acgttgggca cacatcacat ccctcagctc agccatccag      240
ccgtctcagt gattcaccac tcatttgctt aattaataga caggtttgat cactttgtac      300
atggaaggca ctgtgccagt gaacaagcag ttggacccag ccctccagta gggaatggac      360
agctgaaaat ccatgagcaa gaaagaagga aaaagaaaga gttctgagca gccaaaccat      420
ttctcgatga tttcagagcc ttcattctga gcatcagtta tatgctctcc agtgtaatga      480
ctttatagcc aagcacagta attgatatta ctgtgaaggc ccttaacta tcaagaaatg      540
gttgaggccg ggcacattgg ctcatgccta taatcccagc acgtgggagg ccgaggcagg      600
cagatcactt aagcccagga gttcaagccc agcctgggca acatgatgaa agcccatctc      660
tacaaaaaaa aaaaaaaaaa actcgagggg gggcccggta cccaattcgc cctatagtga      720
gtcgtat                                                                727
```

<210> 489
<211> 600
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (553)..(553)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (560)..(560)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (589)..(589)
<223> n equals a,t,g, or c

<400> 489
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gaattcggca cgagcggcac gagccgagat cgttctgggg ctgctggtat ggacgcttat       60
tgctggaact gagtacttcc gggtccccgc atttggctgg gtcatgtttg tagctgtatt      120
ttactgggtc ctcaccgtst tcttcctcat tatctacata acaatgacct acaccaggat      180
tccccaggtg ccctggacaa cagtgggcct gtgctttaac ggcagtgcct tcgtcttgta      240
cctctctgcc gctgttgtag atgcatcttc cgtctcccct gagaaggaca gtcacaactt      300
caacagctgg gcggcctcat cgttctttgc cttcctggtc accatctgct acgctggaaa      360
tacatatttc agttttawag catggagawc caggaccata cagtgattta ccattttgat      420
aattaaaagg aaaaaaaaag gaagactctc actgtaaaaa cagctgtagg tataatgtat      480
```

```
attcccagag aattgtattt aactaattaa tgttttttat attcttaaat ttgctcacaa    540
attgtggttt gtnacaattn aactgggtta ctttatttgg caagtgttnt aggcttttaa    600


<210> 490
<211> 1242
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (288)..(288)
<223> n equals a,t,g, or c

<400> 490
ttcgtatcca ctaggatggc tctaatcaat acaaagtat tgtcaaggat gtagaaaaat      60
tggagccctc ctgccttggt gggagtgtaa tatggtgcca gatacaacct ccatcctgaa     120
gctcatctgt atgcttcctg tttgtgtttt taaactttta ctatatcttt atgtcctcat     180
aagaatatgt actatcattt ggtgttttaa agtgtacata aatgctgtca tcctgaacaa     240
atcctctcgc taactgcatc tttaactcta tactatattt tcaagatntg tccatgttga     300
tccacgtagc tccctagttc cctttaactg ctataagata ttctgttgcg tcaatatatg     360
acaatttatg catgctttgt tgacaggtaa ttggattttt agtgttttgc ctttacaaaa     420
atcactgcat cttttgcaca tgtctacttg tgcatatgaa ctgaggtaaa attgctgggc     480
cttactgtaa atatgttgtt ttaattcact ttgcgctgct gtaacagaat accatagact     540
gggtgcttat aaagaaaaga aatttatttc tcatagttct ggagaatggg aattccaaga     600
tccattcaca ggttcggttg tctggggaar actttcttca cacatcctca cttggcgaaa     660
cggaagggcc tgggttgatg ctgtgtgaam cctcttttat aagggcctta gtctcattcc     720
caaggaggag ctctcataac ctaatcacct cttaaaggcc ccccactcaa tactatgaca     780
ttgaatttca acatctgaat tttagagggg acactgcaaa cctgtcatat gtctttatct     840
ttactatcac taaattgtcc aaagtgattg caacagtgat ttatatactc aacccacaga     900
gtataagaat ttctcctttc tagctgggca cggtggctca cgccagtagt cccagcactc     960
tgggaggccg agatgggcgg atcacttgag gccaggagtt caagaccagc ctggccaaca    1020
cagtgaaacc ccatctctgc taaaaataga aaaagttagc tagctatggt gcgcacacc     1080
tgtaatccta gctatttggg gggctgaggc aagagaattg cttggacctg ggaggctgag    1140
gtagcagtga actgagatcg taccattgca ctccagcctg ggtgacagag cgagactctg    1200
tctcagaaaa aaaaaaaaaa aaaaaaaaa aaaaactcg ta                         1242


<210> 491
<211> 970
<212> DNA
<213> Homo sapiens

<400> 491
ctcgtgccga attcggcacg aggtgcccag gctctcaggg cagagggtcc agtgtgatca      60
ctttgcatgg cctctctccc ctcctgagct tgtgccaggg ccccagggct gacctggaga     120
ggaaaawggc agagggtgaa gatggggtgt ctggtttggg gaccatcctg gcccccttg      180
tcactgttgg catctcttct gcacagtggc attgctggga ggtgcttact gtgcctattc     240
aaggggctgg cagccgcagc ctcactgcag atcagggact tggcttcccg gttgaccaca     300
ggtccaagaa cctgcagggt ccagcctccc ccccatcccc agtcttcccc accctggccc     360
ggccctccag gtgcagaaac atgcaggccc ctctccagga ctgtgggagg agtgtgtccc     420
tcagactggc ctgtgtcctg ctcctctta ccacctcttc cagaggttgt cacctgcagc     480
tgccccagga taaaggcaag gccagagagg actcctgaac tcctgtgtgc ctggggtggc     540
aggggcaaac atagccaact ggtggcctga gcggggccat ggtgagaca cccttggtgg     600
cttgtcccac atcaagctgg gargtgacac tgaggatgca ttagtctgca gcgtatgata     660
aaaacggcat ttcaggccag gcgtggtggc tcatgcctgt cacccagca ccttgggagg     720
ccgaggtggg cagatcacat gaggtcagga ctttgagacc agcctggcca acatggtgaa     780
aactcatctg tactaaaaaa acaaaaatta tgtgggttgg tggtgtgtgc ctgtaatccc     840
agctacttgg gaggctgagg caggagaatc acttgaacct gggaggcgga ggctacaacg     900
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agccgagatt gcaccactgc actccagcct gatccgtctc aaaaaaaaaa aaaaaaaaaa      960
aaaaactcga                                                             970


<210> 492
<211> 1388
<212> DNA
<213> Homo sapiens

<400> 492
ggcacgaggt aagttgcaag gtacacccac gggtgattta tcactcttac aaagatgata       60
actaatgaag accgcatcta gaatgctctt actggagatg gtttacagag catttttaat      120
catcatactt agatttatat taatatttct tttcaaacta aattattcca aactgtgccc      180
tgagatacca tttggcctca agttcttttc tttcgtctgt attaaggtgc aaataaaaaa      240
gactagtagg aaaagaaggc cttatttatg aaggttgtct atagctctga gcttggtagc      300
tacataaaat gagtaataac ctaaataagt aaaactaatgaagatctaac tagattactt      360
tgcttaatat taacatttta cccgcccccc gccgtgaaac atttggcaga tgttctgcag      420
gactcatgag gacattggtg gctacagctg cttctggcac tgccccccca acccccccagt      480
gaggtgaact tctttacaca tccagcaagc tttagttatc ttcttctccc atttgagata      540
actgtggcta caagaatctc agttaaatca gatgtttaaa ttaggtgcca aaaaatctta      600
cagacactga actaatactt aaatcaagga acacttcagt tctccataaa atctggtgcc      660
attttccaaa gaaacagagg atctttgttt cacacccgtg gtactggaat tgcaacagtg      720
aggcattcta gctctcacat gccaatgcga gtggcattca ttcttgctca ctcatttctg      780
cttctcattg tcacacttgg aggctctttg ggggtatgtt tcagttgatc tgagaaactg      840
ggtgttacca atttactaga gagtttctta aaatgtatct gaaacaaact attaatgggc      900
attctgtggt ggtaaaacca ggcaacgcct ccctacacta tctgtccttt cagagctaag      906
aatctgttat tttgaattgt tcacgaagag tgattctgac tctgcttcag tgcacacttt     1020
acaaaccatc gagcctcatc aaaggagtga gttgagctga ggaattagag taaagaatac     1080
aggtatagtg ccgggcgtgg tgctcacgcc tgtaatccca cattttggg aggacaagga     1140
gggtggatca cctgaggtca ggagttcgag accagcctga ccaacatgga gaaaccctgt     1200
ctttactaaa aatacaaaat tagctggacg tggtggcaca tgcctgtgat cacagctact     1260
caggaggctg aggcaggaga atcgcttgaa cccaggaggc ggaggttgtg tgagccgag     1320
atcacgtcac tgcactccag cctgggcaac aagagtgaaa ttccatctca aaaaaaaaa     1380
aaaaaaaa                                                              1388


<210> 493
<211> 649
<212> DNA
<213> Homo sapiens

<400> 493
ggcacaggga agtgtcaagc gggcgctccc ccatctccgc cgctattacc actgaacccg       60
gacccctac ccaggtccag ggccagccgc catgacgaac gtgtactcct ggatgggat      120
tctggtgttt ggtttgctct ttgtttgcac ctgtgcctac ttcaagaaag tacctcgtct      180
caaaacctgg ctgctatcag agaagaaggg tgtttggggt gtgttttaca aagccgctgt      240
gattggaacc aggctgcatg ctgctgtggc aattgcttgt gttgtaatgg cctttttacgt      300
cctgtttata aaatgaattc caaagcaccc aagtcatcaa ctgccaacca aggggacggg      360
gatgaagaac ctgttggaga cctgaaccca gtgtaggaga gttcagctga aatcatcggt      420
ccccaggatg acaccacagc atctgcccct gctatatgtg gggaaaactc atggtcacga      480
acattattta tgcttcaggg gactacagaa agccagcttc ctttgatcta tgtgtaaatc      540
agtccttggc agagtgcata taatgtccgg ataaattaca cccctcggtg ataagattac      600
atacctcctt cataaaaacc tgtaaaaaaa aaaaaaaaaa aaaaaaaa                   649


<210> 494
<211> 1699
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1692)..(1692)
<223> n equals a,t,g, or c

<400> 494
ggcatcttnt atttagcaca atgtttttaa ggtttattca tgttgtagca aggtacgcaa   60
ttgtttttca tttaaagaaa aagtctcaat gctattacaa ttttccatat tctttgcacc   120
tgtggtctgt ctccctaaat atagcccctt tatgaaggag gaatgcaaag ctgatccaac   180
tagagactac aaattccttt atatttatat agaaaggggc acatagtaat gaattggaag   240
ccatatccaa gctagaatca tctagattta gtgagattga ctagtgcaacccaatttttt   300
gcactcatcc cctgtccatc aggtacctgg aaatgattry aawgattttg aactaggtta   360
ctggtataat catactgctg ttgagattag caggcaaatt accaagttag ttttttattg   420
gagggggaga ggtcaatgtg tgagggtgca tagtggagac tggggaccag gctgacaaag   480
atgaattgtt ttaggtagtg atgactttga ggtaatggga taagtgagtg aaaatgactg   540
gttggcgttg gagatgggat ggagatggag cttggagaaa aagaatagca ctagtaaatg   600
gatttagcta gacaaaggag atttacccta ttccatttag cacagtgagg agaggctaga   660
cagctaggat gcaataaaaa aaattttaat gagaaatgtg tgtgtagat taattttatt   720
aatctcaagt tatagattaa aaaatttaag taccacataa atgccatttg cctttgctaa   780
tgttacattt ttatgaagaa ggagccttgc ataaagaatg atataatgga cttttgggac   840
ttgagggaga agcttgggag ggggggtaaa ggataaaaga catattgggt gctgtgtgta   900
cactgcttgg gtgacaagtg gactaaaatc tcagaaatca ccactaaaga acttatctac   960
ataaccaaaa atcacctgta ccccagaaac tattgaaata aaaaaaaaga aggggacttg   1020
gacagatagc cgtattcttt gccaaattat agttacattc tgctcatggg ggattaggag   1080
gttcaatgga agaaaggccc cactcagctt tctcccctc taaaatgttg ccttgtaaat   1140
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ggatacttgg agatagatcc tgactcccta tccctcctag atctttattt atcctatttg   1260
gaacccaggg aaatggcctt aaagctgatg aaccacaggg tgtccaagtc atggagctat   1320
tgaggttctc cccaagtatc tttttaaattg ctgcatttgg gatgggcgca gtggcttaca   1380
cctgaaatcc cagcactttg ggaggctaag ttgggaggat tgcttgggtc tgggagttta   1440
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aggcatggtg acacaccagc tacttataat gctgaggcag gaggatcact tgagcccagg   1560
agtttgcggc agacagtgag ctatgattgt gccactgtac tccagcctgg gtgacagagc   1620
aagaccctgt ctcttatttta aaaaaaaaa aaaaaaaaa actcgagggg gggcccgtac   1680
ccaatcgcct tncatgatg   1969

<210> 495
<211> 433
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (424)..(424)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (430)..(431)
<223> n equals a,t,g, or c

<400> 495

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gggacaggca caagggaagc ctccagcccc ttttctgcca caagcaagag gcactcagcc       180
ctacctgaga tgtgttattt tttagaaata tctttattga tggtctttgc actcaataa        240
aaggcagcat atggttgttg caatataaat ggtacagaag tccacagagc aaaagggcca       300
gtttctgtcc cctttcctct ctccaggcct ctttctggga ccccattatt ggatagatta       360
agacctttcc agaccttgta aaaaaaaaaa aaaaaaactc ggggggggsc ccggaaacca       420
attngccccn naa                                                         433

<210> 496
<211> 1537
<212> DNA
<213> Homo sapiens

<400> 496
atcatatagg aaacggtagc ctgcagtacc ggtccggaat tcccgggtcg acccacgcgt        60
ccggagcagc aagagatttg tcctggggat ccagaaaccc atgataccct actgaacac        120
gaatcccctg gaagcccaca gagacagaga cagcaagaga agcagagata aatacactca       180
cgccaggagc tcgctcgctc tctctctctc tctctcactc ctccctccct ctctctctgc       240
ctgtcctagt cctctagtcc tcaaattccc agtcccctgc accccttcct gggacactat       300
gttgttctcc gccctcctgc tggaggtgat ttggatcctg gctgcagatg ggggtcaaca       360
ctggacgtat gagggcccac atggtcagga ccattggcca gcctcttacc ctgagtgtgg       420
aaacaatgcc cagtcgccca tcgatattca gacagacagt gtgacatttg accctgattt       480
gcctgctctg cagccccacg gatatgacca gcctggcacc gagcctttgg actgcacaa        540
caatggccac acagtgcaac tctctctgcc ctctaccctg tatctgggtg gacttccccg       600
aaaatatgta gctgcccagc tccacctgca ctggggtcag aaaggatccc caggggggtc       660
agaacaccag atcaacagtg aagccacatt tgcagagctc acattgtac attatgactc        720
tgattcctat gacagcttga gtgaggctgc tgagaggcct cagggcctgg ctgtcctggg       780
catcctaatt gagctggaaa agcttcaggg gacattgttc tccacagaag aggagccctc       840
taagcttctg gtacagaact accgagccct tcagcctctc aatcagcgca tggtctttgc       900
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ggcataaatt ccttctcaga taccatggat gtggatgact ccccttcatg cctatcagga      1140
agcctctaaa atggggtgta ggatctggcc agaaacactg taggagtagt aagcagatgt      1200
cctccttccc ctggacatct cctagagagg aatggaccca ggctgtcatt ccaggaagaa      1260
ctgcagagcc ttcagcctct ccaaacatgt aggaggaaat gaggaaatcg ctgtgttgtt      1320
aatgcagaga acaaactctg tttagttgca ggggaagttt ggatatacc ccaaagtcct       1380
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aagagttgct gttgaagttg tatatttttg atcaatatat ttggaaatta agtttctga       1500
ctttaaaaaa aaaaaaaaaa aaaaactcg aggggggg                               1537

<210> 497
<211> 1782
<212> DNA
<213> Homo sapiens

<400> 497
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tggggatctt actgggcctg ctactcctgg ggcacctaac agtggacact tatggccgtc       120
ccatcctgga agtgccagag agtgtaacag gaccttggaagggatgtg aatcttccct          180
gcacctatga ccccctgcaa ggctacaccc aagtcttggt gaagtggctg gtacaacgtg       240
gctcagaccc tgtcaccatc tttctacgtg actcttctgg agaccatatc cagcaggcaa       300
agtaccaggg ccgcctgcat gtgagccaca ggttccagg agatgtatcc ctccaattga        360
gcaccctgga gatggatgac cggagccact acacgtgtga agtcacctgg cagactcctg       420
atggcaacca agtcgtgaga gataagatta ctgagctccg tgtccagaaa ctctctgtct       480
ccaagcccac agtgacaact ggcagcggtt atggcttcac ggtgccccag ggaatgagga       540
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341

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ttagccttca atgccaggct cggggttctc ctccatcag ttatatttgg tataagcaac    600
agactaataa ccaggaaccc atcaaagtag caaccctaag taccttactc ttcaagcctg    660
cggtgatagc cgactcaggc tcctatttct gcactgccaa gggccaggtt ggctctgagc    720
agcacagcga cattgtgaag tttgtggtca aagactcctc aaagctactc aagaccaaga    780
ctgaggcacc tacaaccatg acatacccct tgaaagcaac atctacagtg aagcagtcct    840
gggactggac cactgacatg gatggctacc ttggagagac cagtgctggg ccaggaaaga    900
gcctgcctgt ctttgccatc atcctcatca tctccttgtg ctgtatggtg gtttttacca    960
tggcctatat catgctctgt cggaagacat cccaacaaga gcatgtctac gaagcagcca   1020
gggcacatgc cagagaggcc aacgactctg gagaaaccat gagggtggcc atcttcgcaa   1080
gtggctgctc cagtgatgag ccaacttccc agaatctggg caacaactac tctgatgagc   1140
cctgcatagg acaggagtac cagatcatcg cccagatcaa tggcaactac gcccgcctgc   1200
tggacacagt tcctctggat tatgagtttc tggccactga gggcaaaagt gtctgttaaa   1260
aatgccccat taggccagga tctgctgaca taattgccta gtcagtcctt gccttctgca   1320
tggccttctt ccctgctacc tctcttcctg gatagcccaa agtgtccgcc taccaacact   1380
ggagccgctg ggagtcactg gcttgccct ggaatttgcc agatgcatct caagtaagcc   1440
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actattcaac tttggcatct tgccaccaga agacccgagg gaggctcagc tctgcagct    1620
cagaggacca gctatatcca ggatcatttc tctttcttca gggccagaca gcttttaatt   1680
gaaattgtta tttcacaggc cagggttcag ttctgctcct ccactataag tctaatgttc   1740
tgactctctc ctggtgctca ataaatatct aatcataaca gc                      1782

<210> 498
<211> 574
<212> DNA
<213> Homo sapiens

<400> 498
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gcctgccgac catgcccgcg ggcgtgccca tgtccaccta cctgaaaatg ttcgcagcca    120
gtctcctggc catgtgcgca ggggcagaag tggtgcacag gtactaccga ccggactga     180
caatacctga aattccacca aagcgtggag aactcaaaac ggagcttttg ggactgaaag    240
aaagaaaaca caaacctcaa gtttctcaac aggaggaact taaataacta tgccaagaat    300
tctgtgaaca atataagtct aaatatgta tttcttaatt tattgcatca aactacttgt     360
ccttaagcac ttagtctaat gctaactgca agaggaggtg ctcagtggat gtttagccga    420
tacgttgaaa tttaattacg gtttgattga tatttcttga aaactgccaa agcacatatc    480
atcaaaccat ttcatgaata tggtttggaa gatgtttagt cttgaatata cgcgaaata    540
gaatatttgt aagtctacta taaaaaaaaa aaaa                                574

<210> 499
<211> 795
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 499
ngaactagta tattcaccgt ctatgaggcc gcctcacagg aaggctgggt gttcctcatg     60
tacagagcaa ttgacagctt ccccgttgg cgttcctact tctatttcat cactctcatt    120
ttcttcctcg cctggcttgt gaagaacgtg tttattgctg ttatcattga aacatttgca    180
gaaatcagag tacagtttca acaaatgtgg ggatcgagaa gcagcactac ctcaacagcc    240
accacccaga tgtttcatga agatgctgct ggaggttggc agctggtagctgtggatgtc    300
aacaagcccc agggacgcgc cccagcctgc ctccaggtgc agtacaatga catttttaaa    360
aatcgcccag caaaggtctt tgaattttat ttcatccaag aaaatccaca gctctttaag    420
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ctctagattt gtccaaattt aaaatcctga agttagagat ggtatttcac tccttcctct      480
attcccagga cctagctttt tttttttaac atacacaata gggatttgat aagtttctga      540
tggctgcagg catgtaagag catttcagtg gtattgaatc aatgaagaat tttgttgaca      600
tgtgaaatct tataaaaata ttctttaccg aaggactgag ttatgtggca gtgggtacat      660
tcattgtttc atccctcccc tagtaactgg gataaatatg ttgaacata gtctctctgt      720
ttttctgcat ttggaagctt tcagaggaac ataatgtaga ggtgtttctt tagcaaagtg      780
cactgatagc aaaca                                                      795
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<210> 500
<211> 1742
<212> DNA
<213> Homo sapiens

<400> 500
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ggcacgagct cgtgccgctt tgtagtctag ggagtttaat taaagtaagt ggagacaaaa       60
gtactctttt gagagctgtc atttctctta gtgtgacgct attaataatg tagtgtaatg      120
ctattttgga agtttggttc tttcctttc ttttgtcttc ctctgactct tttctgtatt      180
ctaaatgaaa ggggaataat gcacttagag gggggcactc tccaaattc actgtctcat      240
gtacgacatt atctccgact tcggctctca tgttttgaaa aaatacctct tcatcgctct      300
attttattt ttcttcttct tttattgtga atctctttta ccaaaaacat ttgtagggtt      360
cttcacaaag atttttttt tcaatcagga tgaaaactag atcatgatgt gaccatttca      420
ctgtgagtgt aacttccctt tttgacagct ccattagatc tgccaggtta taaatcttca      480
tatttctgac ttgccttgaa atcagaaagt gttttcatta tgctagtctc tgtgagcaac      540
aagcatgaag gaaggcatgg caggtatcat agcccctttg atgaacttac ctgtttcaac      600
tcagtgccag ggcagaacat ttactgctaa ccctgatgg tcaactttga ttgcaaatta      660
tgtgtggtac attttgaatt taaagaatgt ttctgagatt attctacgat cacttgtcat      720
ttttatgtgt gcagtaatgt gttgtgtata acttggattt caacaatatc cattgtttga      780
aagttagaaa atattctaag aatactaatt atcttgctca ataatcatt taagtacaac      840
tgtcacttga ttatggtgaa tatttttaag taaaattata tatttaaggt gtgctacctc      900
taattttatt gtcatacaaa aagcagatta ttgaacatgt taatgtaaat tgtactttta      960
atttttcca gtactctaga acatgtgtaa ggttaaaaga atttaaatta cccaggtttt     1020
tcttttaca taataaataa gaagaaatca caaggaagc agatattata ttgttttaa     1080
tatacacatg aaattgtttg actttatttt gagacctcac acaagtataa acatggcagt     1140
ggtgtgtatg atcaaagtaa gaaattaaag agttaccggt tctttataaa ccagaagtcc     1200
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agaatattag gaaaaatagg ccgggtgcag tactcacgcc tgtaatccca gcactttggg     1380
aggccgagga gggcggatca cctgaggtca ggagttcaag accatcctgg ccaacatggt     1440
gaaacccat ccctacaaaa acacaataat taggcaggca tgatggtgag tgcctataat     1500
cccagctatt caggaggctg aggcgggaga atctcttgaa cccaggaggc ggaggttgca     1560
gtgagccaag attgcgccat tacactccag cctgggcgac agagcgagac tccctctcaa     1620
aaagaaaaag aaaaagaaa aagaatatt aggaaaata tcttaatgca aaatatata     1680
attagtaatc tgccaacact gagatgtact ataaggccaa gaagaaaaa aaaaaaaaa     1740
aa                                                                   1742
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<210> 501
<211> 1443
<212> DNA
<213> Homo sapiens

<400> 501
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ggaaccattg gcctatattg ggttggact attattatga gtgttgttgt ttttgtgcca       60
ggaaacattg tagggaagta tggaacacga atttgccctg cttttttctt aagcatacca      120
tatacttgtc ttcctgtctg ggctggtttc agaatctata atcagccatc agaaaattat      180
aattacccct caaaggttat tcaagaagcc caagcgaaag acctgctgag aagaccattt      240
gatttaatgt tggttgtgtg tctcctcctg gcaactggat tttgcctgtt cagaggtttg      300
attgctttgg attgcccatc tgagctctgc cgattatata cgcaatttca agagccctat      360
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343

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ctaaaggatc ctgctgctta tcctaaaatt cagatgctgg catatatgtt ctattctgtt      420
ccttactttg tgactgcact dtatggctta gtggttcctg gatgttcctg gatgcctgac      480
atcacattga tacatgctgg aggtctggct caggctcagt tttctcacat tggtgcatct      540
cttcatgcta gaactgctta tgtctacaga gtccctgaag aagcaaaaat ccttttttta      600
gcattaaaca tagcatatgg agttcttcct cagctcttgg cctatcgttg tactacaaa       660
ccagagttct tcataaaaac aaaggcagaa gaaaaagtgg aataaaaata ttacttcatg      720
ttcctccttt ctaaattact aacttttgtt atactggtac tgatattttg tcccatttca      780
ctctcttctc atacgtgagt acttaagaat atgtacattc ttgctctgca ctgtatgtgt      840
gagctatatg gtattgtgta aatttttttt gaaggaaaat ggaaattctt gagaaacagt      900
ttgtttaaag aaatatattc aaaatcattt gtgaataaac ttgatcatcc atctcaatat      960
tgtttgacat ataaaataat tataagtgta aaaaattaca atttagtgcc aacagtagtg     1020
agcatgaaat gaaactattc aaaagagaat atggcctgtg catattaaa aattcaaaac      1080
agtgaatgca gactggagga gtaacttttg caaataagat gaatatgctt cattattaaa     1140
ctcaatataa aaggcaaatc atcagaatat ttttaaatgt tgtttgaaaa atgttttccc     1200
aaggaaagtt tattatttgc tgctgtttca agaaaattac ttttactaaa ttttttttgtg   1260
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tttattggtg gctggaaata tttctattgt atttctgtgt atatttttaa taaaattatt     1380
tttggcctct taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaactc     1440
gag                                                                    1443

<210> 502
<211> 462
<212> DNA
<213> Homo sapiens

<400> 502
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ctgcagctgt gagccaccat gcccagcctt aacttggttt taagacctct gatttgcctt      120
gcctcaatta cctcctttct tattttcttt cctttgttga ctctcatact ctgttctcct      180
aattctcccc cttttccact ccctgcccac cctgaaagac acacacacac acaataagtg      240
ggtggagtaa gaagtcaacg gagttggata taagcattcc tgcttttctg acatctccag      300
tgtcttggag aacaaggatt ctagaatgag ggctcctcat atgcttcct ttcaacattt       360
tttctctgtg ttacttaagc tttcacccca agcatgtttg acagagagcc agtgcattcc      420
ccttactttt tacaaaaata aaaaaaaaaa aaaaaaactc ga                         462

<210> 503
<211> 2541
<212> DNA
<213> Homo sapiens

<400> 503
tggggaaacg gtccctctag aactagtgga tcccccgggc tgcaggaatt cggcacgagg       60
agaaggtcac taccatcatg gagatggctt ccaagatgaa agacacaggg ttcatcgtgt      120
ttgctgtgct tctgctggtg tcatgcctca tcctcatctt tgtcattgcc ccacgttacg      180
ggcaaaggaa tatcctcatc tacatcatca tctgctctgtgatcgggggcc ttctctgtgg      240
ctgctgtcaa ggggctgggc atcaccatca agaacttctt ccaggggctg ccagttgtcc      300
ggcacccgct cccctacatc ctgtccctca tcctggcact gtccctcagc actcaggtca      360
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tgttcttcac cacggtggtc gttacctcgt ccatcatcct cttcaaggag tggtacagca      480
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aaacccacc ccccttctccc gccccggaac ccactgtcat tagactggaa gacaagaacg      660
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ttataatcca ttcctgaagc ttggaatatg tgagtgagag gatgagtccg atggtacagc      780
ctgcccctccc aatttcaaaa ccacctggtt attttccagt gcaactgtta ccaatgggct      840
ctcttttctt gagaagttca tttatacctc atcactgttt ccaggagaaa aatctttacc      900
caaatagcaa tggtggcaga acttcctgga aacagattca gtgaccaaat acccaagttt      960
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344

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acatcagtgc ctgcaggttc cctggacctt ccttctcatt cattctttcg gtgccatctc    1020
tatgccgttg ggaagaagat ggagtctgac ccactgaatg tagcacagtc caaggacttc    1080
tctaagatat tggtcattgg aagttccttc acaccaattc tcctcctgag acggaatctc    1140
cgttgttgtt gttgttgttg ttttctagcc caaggatgac atagagctgg ctcccagagg    1200
cccacagagc aattggccat gcctccctat ccagagctga cagggacaca accagtgtaa    1260
aatatcctgt tgcctttgtc acttcctctt tggaggcaga agcaagacct cagctgacct    1320
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ccccctctac ttacatccta aggagtcggt cactgagaca taaaggcagt aatcgcagaa    1500
ctggaaacaa aacaataaca gagccacagc caaactctgg tggccaaacc cagtgttgca    1560
ttttgtctta ctctgaaaga agaacagcaa attcactgct tcaaagtggc ctggctgcca    1620
agctagaatt tggcagaacg cacttttcta ttcctcaagg agtcaaccaa cctagatct    1680
ggggaggtgg aagaggatg aggagcaaag ttgggatttg gcagaaggca gtcccaggct    1740
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aaacgagctc aggggtaatt tctgggttgc agccttaaag gcttggacag ctgtgaatct    1860
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caaaaaacca gagcagctgg agagggagat aattactatt ccttcccttccatctcctt    2100
tctagccaca agagtgtggg ggttggagaa gaaccattag aaagggaaat tagtgggctg    2160
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ctgcggccgc aagggaattc a                                              2541


<210> 504
<211> 561
<212> DNA
<213> Homo sapiens


<400> 504
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atatttgtgt gcatttgcat gtgcaacagt acacacaaac atacataaag agagcaattg    120
ataaggcaaa taaggtaaca tttaacaata atctgataca cataaataga gaaagagcaa    180
ttgataaagt aaatgaggta aaatttaaca ataatctgag caaaaggtat atgtgttttc    240
tttgagacag tctgattctt gcaacttatt ctgtaagttg gaattattt ccaaacatga    300
ttgaaaaaaa accccgcact tggcaacttc ttctcttttt cagcctagaa atgtctgtgt    360
taagtggttt tttatttatt gttgttgttt gttgttattg ttgttttgtt gccaggctcc    420
aactcacaaa atacgagttt aaaaactgcg ttgttatttt tagagatttg tgataataca    480
acttgttata aaatttattc ctcaataaat ataatttctc tactaaaaaa aaaaaaaaaa    540
aaaaaaaaaa aaaaaactcg a                                              561


<210> 505
<211> 809
<212> DNA
<213> Homo sapiens


<400> 505
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gctgcctttg ttgcttatac tgcccggctg gactggaagc ttgctgcaga ggaggctaag    120
aaacattcag gccggcagca gcagcagaga gcagagagca ctgcaaccag acctgggcct    180
gagaaagcag tcctatcttc agtggctaca ggcagttccc ctggcattac cttgacaacg    240
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tcagctccta ccagcagact atcagtgaaa cagctggtca tccgccgtgg ggctgctctg    360
```

```
gggcggcgt  cagccacact  gatggtgggg  ctcacggtca  ggatcctagc  caccaggcac    420
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acggtctgcc  ctgcaaaaac  accaatgggg  tctagtgcag  gtggacactt  tgaaccactc    540
ctcaaaaaaa  gaactttggc  tgattccttg  tggtgacact  cagagggggtc  tgaacagact    600
tgacaattct  gttctggtca  agctggagtt  ttcttctgtg  acttggactg  ctctacagaa    660
gacatcagcc  aactgcacga  gtcagagtcc  agggattgtc  actattatta  ataatgtaaa    720
tggcttcaaa  tgggacactg  cagataaaat  cacaaaaacc  actgttatat  taaagattac    780
acatttcctg  gaaaaaaaaa  aaaaaaaaa                                          809
```

```
<210> 506
<211> 1151
<212> DNA
<213> Homo sapiens
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```
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cagagactca  gtattgtcat  tggcgtggtt  gctggcatta  tgacggtgat  tctaatcatc    180
ttaattgtag  tgatggcaag  gtactgcagg  tccaaaaata  aaaatggcta  tgaagccggc    240
aaaaaagatc  acgaagactt  ttttacaccc  caacagcatg  acaaatctaa  aaagcctaaa    300
aaggacaaga  aaaacaaaaa  atctaagcag  cctctctaca  gcagcattgt  cactgtggag    360
gcttctaagc  caaatggaca  gaggtatgat  adgtcaatg  agaagctgtc  agacagccca    420
agcatggggc  gatacaggtc  cgttaatggt  gggcccggca  gtcctgacct  ggcaaggcat    480
tacaaatcta  gttccccatt  gcctactgtt  cagcttcatc  cccagtcacc  aactgcagga    540
aaaaaacacc  aggccgtaca  agatctacca  ccagccaaca  catttgtggg  agcaggagac    600
aacatttcaa  ttggatcaga  tcactgctct  gagtacagct  gtcaaaccaa  taacaagtac    660
agcaaacaga  tgcgtctaca  tccatacatt  actgtgtttg  gctgaattcc  actctaatat    720
gatgctccat  tatgcaccat  actgtgatga  cctttctact  ccgaaacctg  ctggagcctg    780
cccttggccg  tggggtgtca  gccaatcact  gcttgttcca  cttgttgtac  atttttatttt    840
tgagtctttt  tctttctcat  atacagaaaa  atagtatgaa  aataaaataa  atgtatgaaa    900
cagtattaat  gcagaaatgt  gctactaatg  gatgtctgag  tcaccagaaa  ttccattctt    960
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tattgcaaca  ataagtttga  gactttgtgt  gaacaaaggg  aaattcagcc  tcttatgtct   1080
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aaaaaaaaaa  a                                                            1151
```

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<210> 507
<211> 308
<212> DNA
<213> Homo sapiens
```

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<400> 507
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cgggcgccgt  gctggccgcc  agcctgctct  gggcgtgcgc  cgtgggcctc  tacatggggc    120
agctggagct  ggacgtggag  ctggtgcccg  aggacgacgg  gacggcctcc  gcggaaggc    180
ctgatgaggc  gggtcggccg  ccacccgagt  gagcgacacg  gccgtggggc  ctggcaggcg    240
ctggacagcg  cccgaggact  gggacattaa  acctgacctc  ccctcctcca  aaaaaaaaa    300
aaaaaaaa                                                                  308
```

```
<210> 508
<211> 1986
<212> DNA
<213> Homo sapiens
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<400> 508
ggcacgaggg  aaaactgttt  tatttgcatt  tgaagaagct  attggataca  tgtgctgccc     60
ttttgttctg  gacaaagatg  gagtcagtgc  cgctgtcata  agtgcagagt  tggctagctt    120
```

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cctagcaacc aagaatttgt ctttgtctca gcaactaaag gccatttatg tggagttagg    180
ctaccatatt actaaagctt cctattttat ctgccatgat caagaaacca ttaagaaatt    240
atttgaaaac ctcagaaact acgatggaaa aaataattat ccaaaagctt gtggcaaatt    300
tgaaatttct gccattaggg accttacaac tggctatgat gatagccaac ctgataaaaa    360
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cgtggccacc atgcgcacca gtgggacaga gcccaaaatc aagtactatg cagagctgtg    480
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tattttttctg ttttttggtt gtttgttcat ttgtattagc acaatttaat gtaattcctg   1380
gtttggaggc agcaagacct atgagcaaga actatttactt gaccctcgt ttttttctct   1440
tgttcttgtg tggtctgaaa tctaaaacta gactttatta tgatagattt cctataagcc   1500
aatttctaat aacaaataga tttattattt aatctgtacc ttctatcttc tcataattcg   1560
tggtcttaca gccttccaaa ataactccag ttgggcaccc atgagctagg atcaaacttt   1620
ctttatatac tttatatatt ttacattatt tctgattttt aaagcaaatg attgccatta   1680
tgattacact caacctaaat agttatgaac agtttcagaa caatgaaaaa ttacaatact   1740
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actcttaaat ctataatatt cgatatattc tacaactgc tttattgtag aagccatatt   1860
tatgtttatt ttataatgtt ttctagtgtc aaactgtact gtggagaaaa gaaatgttag   1920
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aaaaaa                                                               1986
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<210> 509
<211> 1781
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 509
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gccgagcgcc aggttctccg cggcagaaag ggcgggtggg agctgtaact gccccggccg    180
cggggcgcgc ccgctcccaa gtcggcttcc tccccgccgg ggccgctttg cctcgggtct    240
ccccattctc caggtcccct gaactgcaca gtcggaggcc gtgggcggcg ggctctgcct    300
ccgccgaggg acagccggat cgccctctg cttcccgcaa ctgccctgat caccccccgt    360
cccagccctt gagtgaacgt ccttctgagc ggcttcctgg ggtcctcccc acgtcccaaa    420
ggccggcaag atggtgtcct ggatgatctg tcgcctggtg gtgctggtgt ttgggatgct    480
gtgtccagct tatgcttcct ataaggctgt gaagaccaag aacattcgtg aatatgtgcg    540
gtggatgatg tactggattg tttttgcact cttcatggca gcagagatcg ttacagacat    600
ttttatctcc tggttccctt tctactatga gatcaagatg gccttcgtgc tgtggctgct    660
ctcaccctac accaagggcg ccagcctgct ttaccgcaag tttgtccacc cgtccctgtc    720
ccgccatgag aaggagatcg acgcgtacat cgtgcaggcc aaggagcgca gctacgagac    780
```

347

```
cgtgctcagc ttcgggaagc ggggcctcaa cattgccgcc tccgctgctg tgcaggctgc    840
caccaagagt caggggcgc tggccggcag gctgcggagc ttctccatgc aggacctgcg    900
ctccatctct gacgcacctg ccctgccta ccatgacccc ctctacctgg aggaccaggt    960
gtcccaccgg aggccaccca ttgggtaccg ggccgggggc ctgcaggaca gcgacaccga   1020
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gcccctaatc cgcagccaga gcctgcgtgt ggtcaagagg aagccaccgg tgcggaggg   1140
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gcacccacaa tgtaccaaag caggctgggc ccagggttct atttattgcc ttgctctgcc   1440
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cccctgcaaa tgaaaccaaa cgtccacctg ggtgtgttca ttccttcctgtccttcaaag   1560
tacttgatag cctttcataa ggcctggcac atgtgtcctg gttgtgtgtg tgtgtgttgg   1620
tgagtgaggt caggtttgcg agtgttttga taaataaata cataaagggg caaaaaaaaa   1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggggcggg   1740
ccgttttaaa ggatccaagt ttacgtacgc gtgcatgcaa c                       1781

<210> 510
<211> 1410
<212> DNA
<213> Homo sapiens

<400> 510
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atacagtata atagaaggaa aaatatctgg tggcttatat gcattggtg tttctcatgg    120
taataagcat tttttttttct cttcctttta gcacaagtgc atacaccttg atagcaccaa   180
atataaaccg gagaaatgag atacaaagaa ttgcggagca ggagctggcc aacctggaga   240
agtggaagga gcagaacaga gctaaaccgg ttcacctggt gcccagacgg ctaggtggaa   300
gccagtcaga aactgaagtc agacagaaac aacaactcca gctgatgcaa tctaaataca   360
agcaaaagct aaaaagagaa gaatctgtaa gaatcaagaa ggaagctgaa gaagctgaac   420
tccaaaaaat gaaggcaatt cagagagaga agagcaataa actggaggag aaaaaaagac   480
ttcaagaaaa ccttagaaga gaagcattta gagagcatca gcatacaaa accgctgagt   540
tcttgagcaa actgaacaca gaatcgccag acagaagtgc ctgtcaaagt gctgtttgtg   600
gcccacaatc ctcaacatgg gccagaagct gggcttacag agattctcta aaggcagaag   660
aaaacagaaa attgcaaaag atgaaggatg aacaacatca aaagagtgaa ttactggaac   720
tgaaacggca gcagcaagag caagaaagag ccaaaatcca ccagactgaa cacaggaggg   780
taaataatgc ttttctggac cgactccaag gcaaaagtca accaggtggc ctcgagcaat   840
ctggaggctg ttggaatatg aatagcggta acagctgggg tatatgagaa aatattgact   900
cctatctggc cttcatcaac tgacctcgaa aagcctcag agatgctttt tcttaatgtg   960
attttgttca gcctcactgt ttttacctta atttcaactg cccacacact tgaccgtgca   1020
gtcaggagtg actggcttct ccttgtcctc atttatgcat gtttggagga gctgattcct   1080
gaactcatat ttaatctcta ctgccaggga aatgctacat tattttttcta attggaagta   1140
taattagagt gatgttggta gggtagaaaa agagggagtc acttgatgct ttcaggttaa   1200
tcagagctat gggtgctaca ggcttgtctt tctaagtgac atattcttat ctaattctca   1260
gatcaggttt tgaaagcttt gggggtcttt ttagatttta atccctactt tctttatggt   1320
acaaatatgt acaaaagaaa aaggtcttat attcttttac acaaatttat aaataaattt   1380
tgaactcctt cctggtataa atgggtccat                                    1410

<210> 511
<211> 1303
<212> DNA
<213> Homo sapiens

<400> 511
aggttaaatg cgtactttt taacctttgt tattttgaaa gttattctga tattcctatc    60
cagttgtgcc tcatttacta gaaatttgct cacatggcca aatgatgtat ccacagaaca   120
```

348

```
atttgaaact agacctttttg gaagcgaact cctacaaact gtcatcaatg ttagcagaac      180
ttgagcaaag acctcaaccc agccatcctt gtagtaattc catcttcagg tggagggaaa      240
aggtaacatt taaggagact ggttgtaatt tcttgattgg gcctgctggg tggagtggct      300
taaagtagca tcagggcaaa aaaggtgtta ggaattctat gtgatattaa tattcatgca      360
gttagttaag aagataaatg ttttwatttt tcttttgagc acaataacaa gagctagaca      420
aaaccgaata cattctgtgt acaccaaact tctatgagaa gctaaaaaac acttttgatt      480
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cacttgcatt aagccaacta aagttgtatt tgtaaaagta atgctatgaa tattactatt      840
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aattatttat acccctcagt ttaaaaactt ccagtccagg cgcagtggct catgcctgta     1020
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gcctggctga cacggtgaaa ccccgtctct actaagaata caaaaattag ccaggcatgg     1140
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gggaggtgga ggttgtagtg ggccaagatc atgccactgc actccagcct gggtgaacag     1260
ggcaagactc tgtctaaaaa aaaaaaaaaa aaaaactcgt agg                        1303

<210> 512
<211> 2118
<212> DNA
<213> Homo sapiens

<400> 512
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atacagccgt gtaaatgaag aggaaaatgt aaagctaaac gggaaatagc gtatctatat      180
tttaggtaac atttaaatga tgataatagc taatattttt atgaacccct tactatgtgc      240
agggtacttg ttctgttttg cctacacatt aattcattta atcctcctaa caacctctga      300
ggtatgtagt attactgccc cattttcac agctgtgctg cagtcgagtgcctgtccaag       360
tacacactgg cctgagtagg cccaggaggc tgggtgatgt ggctccgcag cctccactcc      420
tgtccactgt gcacactgcc tctgttatat taattcatca atatattgagg gtcccttтga      480
tgccacgcac tatccaccac tggcaccctg acacttagac cctaacagat atggctgttg      540
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ccagctaggc tgtgattggg ggatagtggt ttcaggcaga aagaagct actgggtttc       780
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ttatataatc agaattggca tggtgtagag atgtcaaagt gggtgttttg cttttttaata    1500
ctttgtatca gggttatatt ttaacaaaga gataagaata ttagagacag gagtggtggc     1560
tcacacgtgt aatcccagca ctttgggatg ccgaggtggg tggatcacca gaggtcaaga     1620
gttcgatacc agcctggcca acatggtgaa accctgtctc tactataaat accaaaatta     1680
gccaggtgtg gtggcgcaca cctgtaatcc cagctgttca gcggactgag cacggaaat      1740
cgcttgaacc tgggagctgg aggttgcagt gagccaagat tgtgccactg ccgtccagtc     1800
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349

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tgggcaacag agtgagactc tgtctcaaaa taataataat aatagagtct agtcttcatt    1860
ttgccactaa aattatgtct ctctatatat ttatttattc aacacgtatt tattgaaagc    1920
ttgtcatgtg cctggcattg ttctaggtgc taggaatata gcagtgaaca gaatccacaa    1980
gtcctcccct cagggagctt tacattctag aaggggaaga agttctcccc ctcagctcaa    2040
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    2100
aaaaaaaaaa aaaaaaaa                                                  2118


<210> 513
<211> 587
<212> DNA
<213> Homo sapiens

<400> 513
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tcatggccag gggagggtgc accaggcggc cccctgagc gacgctcccc atgatgacgc      180
ccacgggaac ttccagtacg accatgagc tttcctggga cgggaagtgg ccaaggaatt      240
cgaccaactc accccagagg aaagccaggc ccgtctgggg cggatcgtgg accgcatgga     300
ccgcgcgggg gacggcgacg gctgggtgtc gctggccgag cttcgcgcgt ggatcgcgca     360
cacgcagcag cggcacatac gggactcggt gagcgcggcc tgggacacgt acgacacgga     420
ccgcgacggg cgtgtgggtt gggaggagct gcgcaacgcc acctatggcc actacgcgcc     480
cggtgaagaa tttcatgacg tggaggatgc agagacctac aaaaagatgc tggctcggga     540
cgagcggcgt ttccgggtgg ccgaccagga tggggactcg atggcca                  587


<210> 514
<211> 1251
<212> DNA
<213> Homo sapiens

<400> 514
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atcttcgccc tcgtctgggt cctccactac cgagaggggc ttggctggga tgggagcgac     180
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gccatcatcg tctacagact gccgtggacc tggaaatgca gcaagctcct gatgaaatcc     300
atccatgcag ggttaaatgc agttgctgcc attcttgcaa ttatctctgt ggtggccgtg     360
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ccatgggctc cgctttctct ccgagcattt ctcatgccca tacatgttta ttctggaatt     540
gtcatctttg aacagtgat tgcaacagca cttatgggat tgacagagaa acgatttt      600
tccctgagag atcctgcata cagtacattc ccgccagaag gtgttttcgt aaatacgctt     660
ggccttctga tcctggtgtt cggggccctc attttttgga tagtcaccag accgcaatgg     720
aaacgtccta aggagccaaa ttctaccatt cttcatccaa atggaggcac tgaacaggga     780
gcaagaggtt ccatgccagc ctactctggc aacaacatgg acaaatcaga ttcagagtta     840
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accatgtaaa atgttgtaga gatagagcca tataacgtca cgtttcaaaa ctagctctac     960
agttttgctt ctcctattag ccatatgata attgggctat gtagtataa tatttacttt    1020
aatcacaaag gatggtttct tgaaataatt tgtattgatt gaggcctatg aactgacctg    1080
aattggaaag gatgtgatta atataaataa tagcagatat aaattgtggt tatgttacct    1140
ttatcttgtt gaggaccaca acattagcac ggtgccttgt gcakaataga tactcaatat    1200
gtgaatatgt gtctactagt agttaattgg ataaactggc agcatccctg a             1251


<210> 515
<211> 4412
<212> DNA
<213> Homo sapiens
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350

<400> 515

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351

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<212> DNA
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<211> 1370
<212> DNA
<213> Homo sapiens

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<211> 1397
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<222> (1396)..(1396)
<223> n equals a,t,g, or c

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gttccgcgtg gacgcctcaa gtggattaat ttctggaagc ctcaatctgt atgtttagt   1140
atttacatga gaatgttatt tgaatggaat tttcttaacc cagaaggtag tatttataat   1200
catttacttg tagcgaactg tttaaagtta acacttgttt aaattttttt acactatagc   1260
atttatgcaa tggtttacag aattcatgga gttattttta tcagtatggg aattaattaa   1320
aaccttgaat cttaaaaaaa aaaaaaaaag gcggccgct ctagaggatc caagcttacg   1380
tangcgtgca tgcgana                                                   1397
```

```
<210> 522
<211> 931
<212> DNA
<213> Homo sapiens

<400> 522
ggcacgagcg gccgcgggac atccacgggg cgcgagtgac acgcgggagg gagagcgatg      60
ttctgctgga gccgatgcca aaaaccatgc atttcttatt cagattcatt gttttctttt     120
atctgtgggg cctttttact gctcagagac aaaagaaaga ggagagcacc gaagaagtga     180
aaatagaagt tttgcatcgt ccagaaaact gctctaagac aagcaagaag ggagacctac     240
taaatgccca ttatgacggc tacctggcta aagacggctc gaaattctac tgcagccgga     300
cacaaaatga aggccacccc aaatggtttg ttcttggtgt tgggcaagtc ataaaaggcc     360
tagacattgc tatgacagat atgtgccctg gagaaaagcg aaaagtagtt ataccccctt     420
catttgcata cggaaaggaa ggctatgcag aaggcaagat tccaccggat gtacattga      480
tttttgagat tgaactttat gctgtgacca aaggaccacg gagcattgag acatttaaac     540
aaatagacat ggacaatgac aggcagctct ctaaagccga gataaacctc tacttgcaaa     600
gggaatttga aaaagatgag aagccacgtg acaagtcata tcaggatgca gttttagaag     660
atatttttaa gaagaatgac catgatggtg atggcttcat ttctcccaag gaatacaatg     720
tataccaaca cgatgaacta tagcatattt gtatttctac ttttttttttt tagctattta     780
ctgtacttta tgtataaaac aaagtcactt ttctccaagt tgtatttgct attttccccc     840
tatgagaaga tattttgatc tccccaatac attgattttg gtataaaaa tgtgaggctg      900
ttttgcaaac ttaaaaaaaa aaaaaaaaa a                                     931


<210> 523
<211> 1044
<212> DNA
<213> Homo sapiens

<400> 523
ggattttcag agacaaaggt ccaagttagg agacgtaatt actcagtgct ttgaagggac      60
atccaaggtg ctcactctta gccatagccg ttggtttcct ggatgctgac tgtgaagatt     120
ctaaagtgct tcctagggtg ggcggtggtg gcaggaggcc ttggacggag tcaggccaga     180
cccagcctcc tgtttaatag gctgagccca agcgtccctc agatgcgaat ccaacagcct     240
tggtgagttg taagatttca tggaaacttt ccctgacttc tgtctcccc ttgctcccca     300
ttacctggga aaggcagctt tgtgggccat gtgtcccgga agggcctggg ctggctgtgg     360
cccagtgctc aggaccagcc atcttggccc tcacagcgcc ctgcccagtt ggtgtaatat     420
ttgtyttcaa gccattgttg gagcaggcag gcaaaggggg ctttctgagg atccaacgtg     480
tgccagccac tgggatacaa agacaggcct ggttcctagc tgtggggctg ggaagggtat     540
ctgacatcaa tggtggcacc tggcagagga cacacagaca acagcaggca gcatggactt     600
ttatgtttgt agcttgagct ggtttttaatt ggaagctctg tgatttacat aatcacttac     660
aatctctgta aataaggaac tatttatgag gaattgtaaatttcctctct ccccttcttt     720
accctgtctg tgatcttgtc tgtgatgcag taatgatatt ccactctagg ttcccatgat     780
cagtggtgaa atatagtgat tttcacctgt gcttccattc tgaagttctg gaaagaagta     840
ctggatggac tgaagtccag gacaacgtyc caaagaaagg cagagtccag gtaggcttgg     900
aggaccaagc cctggatgag cactggaggg cagaggcctc agtgtccagc actgtgccct     960
gcacatggaa agcccctacg tttgtggaat gaatgaataa taaaaatgtt ttcataagtg    1020
aaaaaaaaaa aaaaaaaact cgag                                           1044


<210> 524
<211> 1143
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1100)..(1100)
```

<223> n equals a,t,g, or c

<400> 524

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ggcacgaggg ctggggtcag caaatataca gggggccgag gcgtcacgtg ggccccatcc      60
tcagcagcag tgcctcggat atcttctgcg acaatgagaa tgggcctaac ttccttttcc     102
acaaccgggg cgatggcacc tttgtggacg ctgcggccag tgctggtgtg gacgacccc      180
accagcatgg gcgaggtgtc gccctggctg acttcaaccg tgatggcaaa gtggacatcg     240
tctatggcaa ctggaatggc ccccaccgcc tctatctgca gatgagcacc catgggaagg     300
tccgcttccg gggacatcgc cttcacccaa gttctccatg ccctcccctg ttccgcacgg     360
tcatcaccgg ccgactttga caatgaccag gagctggaga atcttcttca acaacattgc     420
ctaccgcagc tcctcagcca accgcctctt ccgcgtcatc cgtagagagc acggagaccc     480
cctcatcgag gagctcaatc ccggcgacgc cttggagcct gagggccggg gcacaggggg     540
tgtggtgacc gacttcgacg gagacgggat gctggacctc atcttgtccc atggagagtc     600
catggctcaa ccgctgtccg tcttccgggg caatcagggc ttcaacaaca actggctgcg     660
agtggtgcca cgcacccggt ttggggcctt tgccagggga gctaaggtcg tgctctacac     720
caagaagagt ggggcccacc tgaggatcat cgacgggggc tcaggctacc tgtgtgagat     780
ggagcccgtg gcacactttg gcctggggaa ggatgaagcc agcagtgtgg aggtgacgtg     840
gccagatggc aagatggtga gccggaacgt ggccagcggg gagatgaact cagtgctgga     900
gatcctctac ccccgggatg aggacacact tcaggaccca gccccactgg agttggcca      960
aggattctcc cagcaggaaa atggccattg catggacacc aatgaatgca tccagttccc    1020
attcgtgtgc cctcgagaca gcccgtatg tgtcaacacc tatggaagct acaggtgccg    1080
gaccaacaag aagtgcagtn cggggctacg agtcccaacg aggatggcac atacgggctt    1140
gtc                                                                  1143
```

<210> 525
<211> 791
<212> DNA
<213> Homo sapiens

<400> 525

```
ggcacgagct gcatttgatc tcattctta gtccaatgta agtaagagta aaacaatgac       60
atttaaggcc accaggctat tctcattttt ggaaaaatgc tggattacat tacagcata      120
ttaaatgaga atatcaaggt gtaatatctc cctagaaatt gtctcacctt caatactatt     180
gacattttg gacctgataa ttttgttgtg ggctctagcc tcatgttata ggaggtttac      240
cagttttcct gccctaaact taccggatgt gaatagcaca ctccactacc tacagcagta     300
aaaactaaaa ttgtctctaa acattgacaa attgtccctg gtagtgaaaa tcacccctgg     360
ttgagaccgt gttgttgaaa ataaaacaaa aactttcaca tcaataaata tgttaggctg     420
tgtatgttaa ggattaacat taagacaata tggagcaagc actacatgaa agcagtgacg     480
attggggaat tagtggcaca ttatcctaat agttaatata gtgactgta tatctaaata     540
tcatcctata gagttttct tagattttt cattagtata acaggatgtt gtgtatgtta      600
cactgtatat actgttattt tgagagacaa ttttgggaat tttgccaagg tattttcaat     660
tataggtctt taatacattc taagcaagtg ggtctcaaaa atgggaattt tacaccccac     720
attcttcttc ccatccggtg gacatttgtc aatgtgcgca aatatttctg attaaaaaaa     780
aaaaaaaaaa a                                                          791
```

<210> 526
<211> 2425
<212> DNA
<213> Homo sapiens

<400> 526

```
cgctgccgat cgccgggagg accccgcct cgccgaagac gggcggggga agccgagcct       60
cacggggtcc ccggagctgg gccgggcctc cagatggaga aggcgcaacg gggagttctt     120
gagtaagcca gagcggtgtc cagcgcggtg tagccgcagc cgccgctgtc aggcgcagca     180
acggacaacc ccgtagaagt cggtcggcag gtcctctcca acccgccgct accgcgccgc     240
tgtgggagag accccagcag gagcccaagg gcagctacgg gggcgcgaag gccgctggcg     300
ccgcctcggc cagcccttcc cgcgcggttc cactgcctta aggatgacag tcgtagggaa     360
```

```
ccctcgaagt tggagctgcc agtggttgcc aatcctgata ctgttgctgg gcacaggcca    420
tgggccaggg gtggaaggcg tgacacacta caaggccggc gacctgtta ttctgtatgt     480
caacaaagtg ggaccctacc ataaccctca ggaaacttac cactactatc agcttccagt    540
ctgctgccct gagaagatac gtcacaaaag ccttagcctg ggtgaagtgc tggatgggga    600
ccgaatggct gagtctttgt atgagatccg ctttcgggaa aacgtggaga agagaattct    660
gtgccacatg cagctcagtt ctgcacaggt ggagcagctg cgccaggcca ttgaagaact    720
gtactacttt gaatttgtgg tagatgactt gccaatccgg ggctttgtgg gctacatgga    780
ggagagtggt ttcctgccac acagccacaa gataggactc tggacccatt tggacttcca    840
cctagaattc catggagacc gaattatatt tgccaagtt tcagtgcggg acgtcaagcc     900
ccacagcttg gatgggttac gacctgacga gttcctaggc cttacccaca cttatagcgt    960
gcgctggtct gagacttcag tggagcgtcg gagtgacagg cgccgtggtg acgatggtgg   1020
tttctttcct cgaacactgg aaatccattg gttgtccatc atcaactcca tggtgcttgt   1080
gttttttactg gtgggttttg tggctgtcat tctaatgcgt gtgcttcgga atgacctggc   1140
tcggtacaac ttagatgagg agaccacctc tgcaggttct ggtgatgact ttgaccaggg   1200
tgacaatggc tggaaaatta tccatacaga tgtcttccgc ttcccccat accgtggtct    1260
gctctgtgct gtgcttggcg tgggtgccca tcctggcc cttggcactg gcattattgt      1320
catggcactg ctgggcatgt tcaatgtgca ccgtcatggg gccattaact cagcagccat   1380
cttgttgtat gccctgacct gctgcatctc tggctacgtg tccagccact ctaccggca    1440
gattggaggc gagcgttggg tgtggaacat cattctcacc accagtctct tctctgtgcc   1500
tttcttcctg acgtggagtg tggtgaactc agtgcattgg gccaatggtt cgacacaggc   1560
tctgccagcc acaaccatcc tgctgcttct gacggtttgg ctgctggtgg ctttcccct    1620
cactgtcatt ggaggcatct ttgggaagaa caacgccagc ccctttgatg caccctgtcg   1680
caccaagaac atcgcccggg agattcacc ccagccctgg tacaagtcta ctgtcatcca   1740
catgactgtt ggaggcttcc tgcctttcag tgccatctct gtggagctgt actacatctt   1800
tgccacagta tggggtcggg agcagtacac tttgtacggc atcctcttct ttgtcttcgc   1860
catcctgctg agtgtggggg cttgcatctc cattgcactc acctacttcc agttgttgg    1920
ggaggattac cgctggtggt ggcgatctgt gctgagtgtt ggctccaccg gcctcttcat   1980
cttcctctac tcagtttct attatgcccg gcgctccaac atgtctgggg cagtacagac   2040
agtagagttc ttcggctact ccttactcac tggttatgtc ttcttcctca tgctgggcac   2100
catctccttt ttttcttccc taaagttcat ccggtatatc tatgttaacc tcaagatgga   2160
ctgagttctg tatggcagaa ctattgctgt tctctccctt tcttcatgcc ctgttgaact   2220
ctcctaccag cttctcttct gattgactga attgtgtgat ggcattgttg ccttcccttt   2280
tgccctttgg gcattccttc cccagagagg gcctggaaat tataaatctc atcacataa    2340
ggattatata tttgaacttt ttaagttgcc tttagttttg gtcctgattt ttcttttac    2400
aattaccaaa ataaaattta ttaag                                         2425
```

<210> 527
<211> 1543
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (76)..(76)
<223> n equals a,t,g, or c

<400> 527
```
cttgactgtg ttttattatt tcatggcttg tatgagtgtg actgggtgtg tttctttagg     60
gttctgattg ccagtnattt tcatcaataa gtcttgcaaa gaatgggatt gtcattcttc    120
acttcagcac agttctagtc ctgcttctct ggagtagggt tgttgagtaaggttgcttgg     180
gttgtgcatt gcacaagggc acatggctgt gaggtgtatc ctggcggggg gctgtctacc    240
tgcagtgagg ggcacctttt ctgtttgct caaaggcatg tataagccaa tgggtgacct    300
tatttcctgt gtcttcaggt gtgtggcagg gggcctgggg tggggaggtg gggcgagcga    360
gcagtgtgtg gaaagccttg ttgtcacctg aagcacgcca ggtccagatt gaccaatggt    420
tttctcactt cagggccmac ccacgccccc tttctgctga ggtttgggtg ccatctagtg    480
gtgggatggg acttggttga ctacatttaa ggtaaggtgg acccagcaac tcccagaaac    540
aactccgggg acaccactcc ccatcacact ccacaccgag cctgtgccc ggtctgtgcc     600
```

358

```
cgagctcagc gggaccagga agggatgggc cctgccaggg ttgcccctgc actgtgcatt    660
ctcgcctggg aggcacaagt tctttcatct gcttttcctt cagaggtgct gagcccacgc    720
catagcccct gtgggatggt gggggagggg gcgacccgaa caacagtgca gtcggtatcg    780
agattgggga gaggagcgag tccaaggaga aggtcatgag tttcttttta ctcgtgttga    840
ataataacaa taacaataac aatatggaaa ccaccgcaaa cttggagaaa agttgtaagc    900
acagtaaaga gaagcttcct tctgagtcac ttgagtggtt gccgttctgg ccctgcaccc    960
tctgtgcttt gggacggcgt ccaacccgca ttcatgtcag gagtgagtcg cacgtggctt   1020
tgtggtcatg gcgacttaat ctgcctggac ggtggctccg tctccctggg cttagacgac   1080
cttggcactt ctggagataa gcccatggct cccaggttgt gttcatgtga cgtttccttg   1140
tggtaggttc tgggtctgcg ttttgtctag gagtgtcaca ggatggacac tgcctcctgg   1200
caggggctgc ccaatgcagt tagcctcctg ctggtgttct ctcttgttgc ttggtgaagg   1260
tggccctggt cagcttctcc actgcccagt gaacgacccc tttgtaatga atgagtgggg   1320
aggtagtgtg aagcgatgcc aatatcccat ccctgtcaaa ctgcctttac tttttccttc   1380
cttccttgct cccacctgtg tggatcctgg tccttcttg tattcagggc tgtggtctgt   1440
tatgacattt actctcaggc tcaggtcctg cttgtttggc ccgtgggagc cccttcttct   1500
gcctttgtg ttkttttggt atgtacctac attatttaac tgg                      1543
```

<210> 528
<211> 1174
<212> DNA
<213> Homo sapiens

<400> 528
```
ggaattcggc acgagctggc tgcagggtct ctggggagag aaggggcctc ggcttcacag     60
gatggggctg ccagtgtcct gggcccctcc tgccctctgg gttctagggt gctgcgccct    120
gctcctctcg ctgtgggcgc tgtgcacagc ctgccgcagg cccgaggacg ctgtagcccc    180
caggaagagg gcgcggaggc agcgggcgag gcgcagggc agtgcgacgg cggcggaagc    240
gtccctactg aggcggaccc acctctgctc cctcagcaag tcggacacca gactgcacga    300
gctgcaccgg ggcccgcgca gcagcagggc cctgcggcct gccagcatgg atctcctgcg    360
cccacactgg ctggaggtgt ccagggacat caccggaccg caggcagccc cctctgcctt    420
cccacaccag gagctgcccc gggctctgcc ggcagctgca gccaccgcag ggtgcgctgg    480
cctcgaggcc acctattcca acgtggggct ggcggccctt cccggggtca gcctggcggc    540
cagccctgtg gtggccgagt atgcccgcgt ccagaagcgc aaagggaccc atcgcagtcc    600
ccaagagcca cagcagggga agactgaggt gaccccggcc gctcaggtgg acgtcctgta    660
ctccagggtc tgcaagccta aaaggaggga cccaggaccc accacagacc cgctggaccc    720
caagggccag ggagcgattc tggccctggc gggtgacctg gcctaccaga ccctcccgct    780
cagggccctg gatgtggaca gcggcccccct ggaaaacgtg tatgagagca tccgggagt    840
ggggaccct gctggcagga gcagcacgtg cggggctggg acgcccctg cttccagctg    900
ccccagccta gggaggggct ggagacccct ccctgcctcc ctgccctgaa cactcaagga    960
cctgtgctcc ttcctccaga gtgaggcccg tcccccgccc cgccccgcct cacagctgac   1020
agcgccagtc ccaggtcccc gggccgccag cccgtgaggt ccgtgaggtc ctggccgctc   1080
tgacagccgc ggcctccccg ggctccagag aaggcccgcg tctaaataaa gcgccagcgc   1140
aggatgaaag cgaaaaaaaa aaaaaaaaa aaaa                                1174
```

<210> 529
<211> 1766
<212> DNA
<213> Homo sapiens

<400> 529
```
cggcacgagg agcactgaag tattcactac atgaagtata ttttgcactg tggacacaaa     60
ttagaaaaat tgcaagtagt ggtatattgt aattggcatg cactatatga gcagagtcaa    120
tgtgtctcct tgtagaatat tctctgatga tactcactat tatcccctct ctgctaagct    180
ttgttctgtg tctgaagggc ataaagcatg gaaactacat ttttcagact ccattaccag    240
aaggatatgg ttggatttca gcaatgagtg ggctttgcat aaaatttgga agacgaaaga    300
gaagaaaaac ctggctgctg caggttggaa cactggcaac aatagatacg gagtttgcaa    360
gaagctgcta agcttcctca ggaaaattat ttgtttcaat atttctggca atgggatca    420
```

359

```
tcaattattg ttttcagtgg ttctggctga aaaattggttc aattcttcta tctgagaatt    480
gttcatttct gtgcttcagg aaactaagac catcactggc agtttttgtt gagggatcct    540
tgtgcattca tttttcctta aaacagcctt cctaactttt actcccccag cctctatggt    600
tgtgtaagtc tttaattctt agagttacat ttctcttact cagtatatcc tagtgcggct    660
tctgttttcc agacccaacc ctgactgata tagtctccat gtgtttcaga tggtgggata    720
gtttggatat ttgtccctgc ccaaatttca tgttgaactc taatccccag tgctgtaggt    780
ggggcccaat gggaggtgtt cggatcatgg gggcagatcc ctcacgctt ggtgctgtct    840
tcgtgatagt gagttcttgt aagatctggt cattttaaag tgtttggcac ttgtaccatt    900
tcactgtgtc ttgctcctgc tttcaccatg tgaagtgcct gctccagctt cacttttcac    960
catgattgta aacttcctga ggcctcccta gaagccaagc agatgccatc accagggttc   1020
ctgtaaagca tgcagaactg ttagccaatt atacctcttt tctttacaaa ttaaaaacct   1080
cttttcttta caaaatggaa agaataaagg tatttcttta tagcaatgca agaacggcct   1140
aatacagatg gctctgccat tagtgagaaa attgagacgc tttctctaga tggcaaaaaa   1200
gttgtaaaaa taaaaggaaa ttattaatat accgtctattgtgatcattt actaagttaa   1260
gcatattatt aagaagacaa gcataagttt aacacaattt ggcaatgaat aaaattgaag   1320
gagagagagc atatgttggc tttgctctgt gaaactcaaa tgaaatggtc acctgttcta   1380
gcagctcatg aaaaattctg cattgtttat tatgtgtcag gatcaacctt aaattcagtt   1440
ataaaaagtt tgatgattac aaaaaaaagg gaagcactaa gtaatatagg tacagagagg   1500
gaagagtgtc aaatagaatt ttcaatctgt gtataaggat acttaagcat tttttaagga   1560
aagcagaaag aagcatgaga aagtctacaa tgacatctat gtcaatataa caagctggat   1620
atttagagaa gaaactcttg attaaatact ttttagata tgaacacaca catataatat   1680
gacatgactg tgttcatgga acataaagaa attcctctga ccaaagagaa ctggaaaaaa   1740
aaaaaaaaaa actcgagggg gggccc                                       1766
```

<210> 530
<211> 1021
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (248)..(248)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1004)..(1004)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1014)..(1014)
<223> n equals a,t,g, or c

<400> 530
```
ttcggcagag cccttgcgcg ctcttgaata cctgckttct gtagcgctag ttctcttcaa     60
gatttgctta gtgtcatttc atttcggttt cttttctcgc catgtttttc tgtcggaatt    120
acggttcgtt ttggttctat gtactctcta aaatgttatc gtttttcatt tgtctactaa    180
ttttcgtgca tttgttacta ctgagtttct taatatctga ctggcctccg ccacgggct    240
ctgcaganca taaaatactc aggctgatgg tagtgcagag actctccctc cttgatcagc    300
gcaaacgttg gtctgaggct tgagggatgg agcaacattt tcttggctgt gtgaagcggg    360
cttgggattc cgcagaggtg gcgccagagc cccagcctcc acctattgtg agttcagaag    420
atcgtgggcc gtggcctctt cctttgtatc cagtactagg agagtactca ctggacagct    480
gtgatttggg actgctttcc agcccttgct ggcggctgcc cggagtctac tggcaaaacg    540
gactctctcc tggagtccag agcaccttgg aaccaagtac agcgaagccc actgagttca    600
gttggccggg gacacagaag cagcaagarg cacccgtaga akargtggg caggcagarg    660
aacccgacag actcaggctc crgcagcttc cctggagcag tcctctccat ccytgggaca    720
```

```
gacagcagga caccgaggtc tgtgacagcg ggtgcctttt ggaacgccgc catcctcctg      780
ccctccagcc gtggcgccac ctcccgggtt tctcagactg cctggagtgg attcttcgcg      840
ttggtttttgc cgcgttctct gtactctggg cgtgctgttc acggatctgt ggagctaagc     900
agccttagat agcagcagaa ggcttttttgg attctcctcc ttgaaaagat tctcagttac      960
caaacgtctc cacctagaaa ataaaaatac attaagatgt tganaaaaaa aaanaaaaaa     1020
a                                                                     1021
```

<210> 531
<211> 433
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (309)..(309)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (408)..(408)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (418)..(419)
<223> n equals a,t,g, or c

<400> 531
```
ggcacagctc accttcctac cctccactgg aaaccactcc tctccatgtt gacctcctgg       60
attgcctcca tcccctcccg ctgtggggtt ctgtgtatct gcttgtgttt tggattggtt      120
cactgtctgg atctgtcaag gaagataacc atttttcag gagctgtgta catggtgaaa       180
aatatacagt tctggttgta aggaactctc acttgggaat attattattt aaaaacttat      240
acgttgagct cagtgctgtc acagaggtaa gaatactgtg gaaaggctat aaatattttt      300
ccccaaagnc aggggttgga aacatttttc tttcctaggc tgttgagact cacagggaaa       306
aaaaaaaaaa aaaatccggg ggggggcccc gtacccattg cccctangg gggggttnna       420
aaaagggccc gtt                                                         433
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<210> 532
<211> 1155
<212> DNA
<213> Homo sapiens

<400> 532
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tcaccatctc tgctcctcat cccgcatggt ggggaaggat gcccacccac acctccccag      180
gccatctgtt agagctccaa ccacgtggaa tgacggaatc cattctgttc tctatctctg       420
ctctagtttc aaattcctgg ggaaaaatga cccagctcac ttcaggctcc cactcttggt      300
ccagtgggct gcaaaatttc caagcgtagc ttctgtcagt tccttgcttt gggttaggtg      360
aaaatgaagg gaataattgt gagctgttca gattcaccaa gaaattatct actattgttg      420
ggggagaatg cccaggggac agatgcattt gggtaaggga caataacaag acactagaaa      480
ggaaaatccc aatttattt tcctacagag tcagcatccc acacattttc cttcacagaa       540
actgacaaat aatccatggg ggcagcttag cagatgggtt gaaaaaagcg acaggctcat      600
catcagtttt caacaccttg atacatcagg cttggccctt gctacctcat gcattattt      660
agcacaatgc atctccctct aattgtgtca tgtgctggag gagaatgtga agttctgtct      720
gtctttagca aacatgtttc aagtactgtc tgtctgaaaa ccaaatggaa gagggtaaac      780
ttgatgatcc acttgatttt agtttttagga cctggatgca taggcagatg tcagtttaca      840
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361

```
aggattctgt gtactttaag gaatgttttc tgagcatgtc cagtacaaca gacgctctgt    900
taggtagctg tagttaggat tttttggttg taagtatgtg aagatttaaa tgtatcagct    960
cacttactca gaaaatctga ggcagtgcta gccaaaccaa atggttcaag caaatgtcat   1020
cagtatttgg cctcttccag tctttttact cctctatcct ctgtgtctgc ttacttcta   1080
cacaagcttt ctctatgtgg tggctccaga ttttatatct tctagtagat attttttttaa  1140
aaaaaaaaaa aaaaa                                                     1155
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<210> 533
<211> 727
<212> DNA
<213> Homo sapiens

<400> 533
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agacagggca gatagacact taagagtaaa atgtattaac acaaaggctc tggccgcccc    180
cctacaaagg aggccatgga accgatggaa ctgatggagg aaatgctggg acttgggtc    240
agtgctgaca cacccatggc catacgtttg gtcttcttgg ccttggctgg gctggtggat    300
gggaagccag tatggatcac cttgtggatg gatgcaaaga gaccaaactt ggcgggcact    360
ggaagtacct ggggaagcag gagagactca cactgctgtc atggccccac agcctggagc    420
ctcccctgcc tcctctgcct cttcagagcc cagcagaaag acagagaaag aagcctcctt    480
ggggttccat tacccacact ccaaggtgga aatctttcag atggttagat gatgaaggta    540
gtagaaggca aggatgattg ggagtagaag gaagagtgac aggctagcat gagctgtgca    600
gcagcaagat tccatatgag caaagttcag aaagtgrgmm aaaaggaca agttggatct    660
cctcctaacc ctgacctgca tgatatgggt gtgagaagct tcaactgaga aagctgctga    720
gaaagta                                                             727
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<210> 534
<211> 2112
<212> DNA
<213> Homo sapiens

<400> 534
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aaccccagtt caatacgact cactataggg aaagctggta cgcctgcagg taccggtccg     60
gaattcccgg gtcgacccac gcgtccggga gttcaaagcc atgctgatcg ctgtgggcat    120
ccacctgctg ctgctcatgt tcgaagtcct ggtctgcgac agggyggaga ggggcaccca    180
cttctggctg ctggtcttca tgcctctctt cttcgtgtcc cccgtgccg tggctgcctg    240
cgtctggggc tttcgacacg ataggtcgct ggagctggag atcctgtgct cggtcaacat    300
cctgcagttc atcttcatcg ccctaaagct ggacaggatt attcactggc cgtggctggt    360
ggtgtttgtg cccctgtgga tcctcatgtc gttcctttgc ctggtcgtcc tctattacat    420
cgtctggtcc ctcctgttcc tgcggtccct ggatgtggtt gccgagcagc ggagaacaca    480
cgtgaccatg gctatcagtt ggataacgat tgtcgtgcct ctgctcactt ttgaggtcct    540
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ttggctttcc ttactaactt taatggccac aacatttagg gaaaggggg gcaatcattg    660
gtggtttggc attcgcagag acttctgtca gtttctgctt gaaattttcc catttttaag    720
agaatatggg aacatttcat atgatctcca tcacgaagat agtgaagatg ctgaagaamc    780
atcagttcca gaagctccga aaattgctcc aatatttgga aagaaggcca gagtagttat    840
aacccagagc cctgggaaat acgttccccc ccctcccaag ttaaatattg atatgccaga    900
ttaaactcct agagaggacc caggcacaca cagactccac ttggccttcg cctcttgttc    960
attcatccca aacctggaaa tggaaacagg cttcaaacac tcgtctcacg ccgtgtttga   1020
gatcaccgcc tcatcagtat gcatcataga tggaggggt ttcagtatgt gggtgtgtgt   1080
grtgtgtacc tgggtaagag acttgctttc caggttcgca ctttcaggtg tagctggggg   1140
cagtaagtcg aattgtttta gtaggtcctc aaaaggaata accacacagc tgtttgttta   1200
aatgctactg tacctatcaa aactattgtt taaaaagtat ttttatacac tgctaatcta   1260
aaattgtatt tcagattgtg cctgtcataa caatagcaaa tgtaaaaagt tctctttccc   1320
accacttgtt tataaacctc atagttgata ttttttagtgt tcctactgtt aaaatactct   1380
ctccttgggc tttgctgata ctggtcttta atattctgat aggtgaattt ttctaatgga   1440
```
```
                                  362
```

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atgaacccat gcatatatag tatttatatg aatatttag cagtgtaata tgttgaattc      1500
tagttctctg cattaccatt attacgttaa agtattttt aaagcttarg tgtgaagata      1560
tgtgkctatt gcagatgtcc ttggaaaact gcataaaaca gtatgtgccy ggtgtggatc      1620
ttaccaaagt actaggcatg aatgtaggga ctgcaaatcc catgggtctt aatatttagg     1680
tgttagtaac caaggtctct ggtagtaccc gttagtagag gaagaggcca ctgcccttgg      1740
gaacttgtga caggctctag tgtggtacca ggccataaag tgacactgtt atttagcaac      1800
ttgaatttyt ccacacaggt agtaactgtg tggaaataag caacaagtgg tttgtccatt      1860
tctaagaatc ttaaactatt agttgctgt agtgtgaagc attacttgtc attggaaaga      1920
tggagagagt ggccttaacc ggaagtggtc agtagaagca ggtgtcattt taagggccaa      1980
actttaatct gtcagcaata gggaaacaac tgttcaaatt atctttgtag ataagaacag      2040
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agtttcactc tt                                                         2112

<210> 535
<211> 1598
<212> DNA
<213> Homo sapiens

<400> 535
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ttgtgtgcaa gttagttaac atgaaccttc atttgtaaat tttttaaaat ttctttata       120
atatgctttc cgcagtccta actatgctgc gttttataat agctttttcc cttctgttct       180
gttcatgtag cacagataag cattgcactt ggtaccatgc tttacctcat ttcaaaaaaa       240
tatgcttaac agagaggaaa aaaatgtggt ttggccttgc tgctgttttg attaggaa        300
tttgaaaaag ataattataa tgcctgcaat gtgtcatata ctcgcacaac ttaaataggt       360
cattttgtc tgtggcattt ttactgtttg tgaaagtatg aaacagattt gttaactgaa       420
ctcttaatta tgtttttaaa atgtttgtta tatttctttt cttttttctt ttatattacg       480
tgaagtgatg aaatttagaa tgacctctaa cactcctgta attgtctttt aaaatactga       540
tattttatt tgttaataat actttgccct cagaaagatt ctgataccct gccttgacaa        600
catgaaactt gaggctgctt tggttcatga atccaggtgt tccccggca gtcggcttct        660
tcagtcgctc cctggaggca ggtgggcact gcagaggatc actggaatccagatcgagcg        720
cagttcatgc acaaggcccc gttgatttaa aatattggat cttgctctgt tagggtgtct        780
aatcccttta cacaagattg aagccaccaa actgagacct tgataccttt ttttaactgc       840
atctgaaatt atgttaagag tctttaaccc atttgcatta tctgcagaag agaaactcat       900
gtcatgttta ttacctatat ggttgtttta attacatttg aataattata ttttccaac       960
cactgattac ttttcaggaa tttaattatt tccagataaa tttctttatt ttatattgta      1020
catgaaaagt tttaaagata tgtttaagac caagactatt aaaatgattt ttaaagttgt      1080
tggagacgcc aatagcaata tctaggaaat ttgcattgag accatgtat tttccactag       1140
cagtgaaaat gatttttcac aactaacttg taaatatatt ttaatcatta cttctttttt     1200
tctagtccat ttttatttgg acatcaacca cagacaattt aaattttata gatgcactaa      1260
gaattcactg cagcagcagg ttacatagca aaaatgcaaa ggtgaacagg aagtaaattt      1320
ctggctttc tgctgtaaat agtgaaggaa aattactaaa atcaagtaaa actaatgcat       1380
attatttgat tgacaataaa atatttacca tcacatgctg cagctgtttt ttaaggaaca      1440
tgatgtcatt cattcataca gtaatcatgc tgcagaaatt tgcagtctgc accttatgga      1500
tcacaattac ctttagttgt ttttttgta ataattgtg ccaagtaaat ctccaataaa       1560
gttatcgtct gttcaaaaaa aaaaaaaaa aaaaaaaa                              1598

<210> 536
<211> 1256
<212> DNA
<213> Homo sapiens

<400> 536
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cagagaaaag gtgaaaatgt caatttatgt gcgaaggctg gctacatcca atcttcctct       120
attgttgttt ttggacaacg accccaagct gctcagcctt ggaatcctg gatttacacc        180
agcagcaccc tatccccacc ccttcctcct ggttctcagg cctttgtcct tggactgagt        240
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363

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tacatcattg tcttcgctga ttctaaacct tgggactⱨg actgagctac cagcatctca    300
gggcctctag tttgcagatg gcctgtcaag ggacttagtc tccaaaattg caggagccag    360
tttccctaat aaatcccaat gtgatagttc ttatcccaca ggcccacttt agttcagttt    420
agttttgctt tgtttttaga aatggggtct tgctctgttg ccccagctgt agtgcagtgg    480
ctcactccag cctcaaactc ctgggctctg gcgatcctcc caactcagcc tcctgagtag    540
ctgggattac aggtgcacac caccatgccc agctactttt taattttttt tttttgagac    600
agagtcttgc tctttcaccc aggctggagt gcagtggcgt aatctcagct cactgtaacc    660
tctgcctccc tagtggctgg gaccgcagat gtgtgccact gcacccagct aattttttgt    720
tttcggtaga gacagggctt tgccgtgttg gccgggctgg tcttgaactc ctggcctcaa    780
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gcctactttt taaatttttt gtagagacag ggtcttgcta tattgcccag gctaatctcg    900
aacacctggc ctcaagcgat cttcccatct gggcctctca aagtgctggg attacaggca    960
ggagcccctt aaccaacttc gagaacttgg gaaataagat gtggtgggtt cttgccaccg   1020
tgagccaaac ctgggtcaga acttcatgtg tgatctggcc cctacataca cccactctga   1080
taggatatta tgacactttg gataacⱥtg tcgatttgga ccttgtgtcc cacaggtctt   1140
aaaatatttg gttattccac ttttcccagt gtatagttac cagagcaaat gatagttccc   1200
tttggagaag tattaaggga tcattaacaa atactaacaa aaaaaaaaa aaaaa         1256
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<210> 537
<211> 2801
<212> DNA
<213> Homo sapiens

<400> 537
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ctccctgcgc cgccgccgcc tcccgggaca gaagatgtgc tccagggtcc ctctgctgct    180
gccgctgctc ctgctactgg ccctgⱨgcc tggggtgcag ggctgcccat ccggctgcca    240
gtgcagccag ccacagacag tcttctgcac tgcccgccag gggaccacgg tgccccgaga    300
cgtgccaccc gacacggtgg ggctgtacgt ctttgagaac ggcatcacca tgctcgacgc    360
aggcagcttt gccggcctgc cgggcctgca gctcctggac ctgtcacaga accagaⱥgc    420
cagcctgccc agcggggtct tccagccact cgccaacctc agcaacctgg acctgacggc    480
caacaggctg catgaaatca ccaatgagac cttccgtggc ctgcggcgcc tcgagcgcct    540
ctacctgggc aagaaccgca tccgccacat ccagcctggt gccttcgaca cgctcgaccg    600
cctcctggag ctcaagctgc aggacaacga gctgcgggca ctgcccccgc tgcgcctgcc    660
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cctgcggctg ctggcagctg cccgcaaccc cttcaactgc gtgtgccccc tgagctggtt   1080
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cccagccacc accaccacag ccacagtgcc caccacgagg cccgtgtgc gggagcccac   1260
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cacttactcc gtctgtgtca tgcctttggg gcccggcgg gtgccggagg gcgaggaggc   1800
ctgcggggag gcccatacac ccccagccgt ccactccaac cacgccccag tcacccaggc   1860
ccgcgagggc aacctgccgc tcctcattgc gcccgccctg gccgcggtgc tcctggccgc   1920
gctggctgcg gtgggggcag cctactgtgt gcggcggggg cgggccatgg cagcagcggc   1980
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                                    364
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tcaggacaaa gggcaggtgg ggccaggggc tgggcccctg gaactggagg gagtgaaggt    2040
cccccttggag ccaggcccga aggcaacaga ggcgtggag aggccctgcc cagcgggtct    2100
gagtgtgaag tgccactcat gggcttccaa ggcctggcct cagtcacccc ttcacgcaaa    2160
gccctacatc taagccagag agagacaggg cagctgggcc gggtttcagc cagtgagatg    2220
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ctggtaacgc atgcctgggc cctgctgggc tctcccactc caggcggacc ctgggggcca    2520
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cttggcccca ggaagcgaag gaacaaaaga aactggaaag gaagatgctt taggaacatg    2640
ttttgctttt tttaaatata tatatattta taagagatcc tttcccattt attctgggaa    2700
gatgttttc aaactcagag acaaggactt tggttttgt aagacaaacg atgatatgaa    2760
ggccttttgt aagaaaaaa aaaaaaaaa aaaaaaaaa a                           2801
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<210> 538
<211> 1407
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (353)..(353)
<223> n equals a,t,g, or c

<400> 538
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attaaatgct aatagaccca cttgaggtat gctcgcttaa tggaggatta gagcaaaaca     120
gacttaaaag accaacatgc cagttgtgcc atcccttaag atgaaaagtt ccttttttctg     180
tgttaatgta caaagctttt cttttggcac tgacaactgt gttctacctg ggaattttga     240
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cagtaggcca gctctccaaa cgttgcttag atgcttcaaa attagcatat ttnaagttta     360
ccagtataaa ataccaatgc aactactcta catagccaaa tgtttgtaaa tcacgtctta     420
ttttcctgak gttttcact ccaccaaatc ttacaaatsr ttgaaagaaa tatattctaa     480
cagtacgcac tgaatagtga aaataattag acattttaag aaccagagcc atagaattat     540
tttaaattag tagaaaagag gagctatttc cgaatctata gaataaagta cacctaaaa     600
ctgaatttta tcatataasc aagtaatacc tattagtcat acctaaattt ttcagcactt     660
cattcaatta aaatmcatga attttaaata ttttacatga tgtgaatagg catgataata     720
cttttagtat aaaatctaaa ctttttccat ttatcagaaa tgataaaatc cagttaccac     780
atatcacgtt tataaaatcc ttaattaaat gagtaacttc taaaatataa caatactaaa     840
tatcacactg cgatggaggt cccaaatatg tggtctatca ccactgaatt catgtaatag     900
ataagaaaaa aattagaggt ggatgtcttg ttttgtgtca tgaattacta aaatctctta     960
gtagttgtgg tatattttttg agtaaaatta ccatttccag atttggtttt gaagggcttt    1020
tatagtkgta ttttcctcct cactgttaat aatcataatc ctttttcagt attttagtgg    1080
cctgaacaac tggtttatct acaatctcaa atcctaagtg tataattatg tgcatgttca    1140
atacctcata taatacttgc tcaacagtat agtggtacca tggcattaag atggtgtttt    1200
tgttctacat attttttcaat atttattctt tctatgttga aattatatca ggctttaccg    1260
gtttttttag ttgtttaaat aagtaatatt ttcaaaagaa taaaataacc aatgatatct    1320
cttggaataa tctgtaaaac gtagttataa aattctattt tctacttaga aaaaaaaaa     1380
aaaaaaaaaa aaaaaaaaag ggcggcc                                        1407
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<210> 539
<211> 1097
<212> DNA
<213> Homo sapiens

<400> 539

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ccacgcgtcc gcccacgcgt ccggaagttg cctcctaggc agaaatcaag aaatccaact      60
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gaatctggag atgcgttttt ggtttttggt ttttgttttt tttttttttc cagaggctca     180
tgtatatcct acatcatggt cagtttcaga gcagggctgt gccaccatct cagtgactcc     240
tggaatacta aattggatct ttgtagagga agaaaataac acagttctag attttcccta     300
gctgttaatt agttttatgg cataattaaa atagctcagg agtaaaaaca aagtccagcc     360
ttaacagcct gttaagtctt cttttcttat cttgaaaaga ggtaagataa tgaagtttaa     420
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tccagactct actgctgaaa gacattgtat atttttattg taatcatatg tgatgcaaga     600
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aggccaaaag tcatttcaaa ctgaatctga cggataagat aggggccata gctgagaaaa     840
ataagtagcg aagccgatct aaaccaaggt gtaactgtga aatagtaacc atcttctttg     900
cacgtttcaa aattggccct ggacgccatc gcaagaggaa aattccaaag ctgtgcagca     906
gcggcagtac cattggaaga gtttacagcc taccaggact acttagaagg ggatcatgtt    1020
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caaaaaaaaa aaaaaaa                                                    1097
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<210> 540
<211> 3466
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3462)..(3462)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (3466)..(3466)
<223> n equals a,t,g, or c

<400> 540
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366

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367

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368

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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370

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tgcctggagg ccttgcttga ctacctggat gcccggagcc cgacattgc tctccacgtg    780
gcctcccagc cttggaatcg gttttttgctg tttaccctct tggatgctgg agagaattcc    840
ttcctcagac ctgagatttt gaggctcatg accctgttta tgcggtaccg gagtagcagt    900
gtcctctctc atgaagaggt gggtgatgtt ctgcaaggtg tggctttggc tgacctgtct    960
accctctcga acaccacact ccaggccctg catggcttct tccagcagct ccagagcatg   1020
ggacacctgg ctgaccacag catggcccag accctgcagg cctccttgga gggccttccc   1080
cctagcacct cctcaggcca gccacccctg caggacatgc tctgcctggg aggggtggct   1140
gtatccctgt cccacatcag aaactgatcc tcaggattg aaggcccaga agtggagaga   1200
gaatgagacc tggagacaaa gggcataatt gttggggaaa tggatgacag ctgaagctat   1260
tcatatggag ccatatactc tattgttgaa atagaataag gaaataaaat gatacactca   1320
cataaaaaaa aaaaaaaaa a                                             1341


<210> 548
<211> 912
<212> DNA
<213> Homo sapiens

<400> 548
tcgacccacg cgtccggtca gccagtcgca tccagccatg acagccttct gctccctgct     60
cctgcaagcg cagagcctcc tacccaggac catggcagcc cccaggaca gcctcagacc    120
aggggaggaa gacgaaggga tgcagctgct acagacaaag gactccatgg ccaagggagc    180
taggcccggg gccakccgcg gcagggctcg ctggggtctg gcctacacgc tgctgcacaa    240
cccaaccctg caggtcttcc gcaagacggc cctgttgggt gccaatggtg cccagccctg    300
arggcaggga akgtcaaccc acctgcccat ctgtgctgag gcatgttcct gcctaccatc    360
ctcctccctc cccggctctc ctcccagcat cacaccagcc atgcagccag caggtcctcc    420
ggatcacygt ggttkggtgg aggtctgtct gcactgggag cctcargarg gctctgctcc    480
acccacttgg ctatgggaga gccagcaggg gttctggaga aaaaaactgg tgggttaggg    540
ccttggtcca ggagccagtt gagccagggc agccacatcc aggcgtctcc ctaccctggc    600
tctgccatca gccttgaagg gcctcgatga agccttctct ggaaccactc cagcccagct    660
ccacctcagc cttggccttc acgctgtgga agcagccaag gcacttcctc accccytcag    720
cgccacggac ctytytgggg agtggccgga aagctcccsg gcctytggcc tgcagggcag    780
```

371

```
cccaagtcat gactcagacc aggtcccaca ctgagctgcc cacactcgag agccagatat    840
ttttgtagtt tttatkcctt tggctattat gaaagaggtt agtgtgttcc ctgcaataaa    900
cttgttcctg ag                                                        912
```

<210> 549
<211> 563
<212> DNA
<213> Homo sapiens

<400> 549
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ggcacgagta cagctttgcc attcatagat acatacccatt catcctgtgg cccatttctg     60
```

```
ggcacgagta cagctttgcc attcatagat acatacccatt catcctgtgg cccatttctg     60
acctcttcaa cgacctgatt gcttgtgcgt tccttgtggg agccgtggtc tttgctgtga    120
gaagtcggcg atccatgaat ctccactact tacttgctgt gatccttatt ggtgcggctg    180
gagtttttgc ttttatcgat gtgtgtcttc aaagaaacca cttcagaggc aagaaggcca    240
aaaagcatat gctggttcct cctccaggaa aggaaaaagg accccagcag ggcaagggac    300
cagaacccgc caagccacca gaacctggca agccaccagg gccagcaaag ggaaagaaat    360
gacttggagg aggctcctgg tgtctgaaac ggcagtgtat tttacagcaa tatgtttcca    420
ctctcttcct tgtcttcttt ctggaatggt tttctttttcc attttcatta ccacctttgc    480
ttggaaaaga atggattaat ggattctaaa agcctaaaaa aaaaaaaaaa aaaaaaaaaa    540
aaaaaaaaaa aaaaaaaaaa aaa                                            563
```

<210> 550
<211> 413
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (407)..(409)
<223> n equals a,t,g, or c

<400> 550
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gaattcggca cgagtgcagc ttcattttgg gctgccttag ccatgaagct ccttttgctg     60
actttgactg tgctgctgct cttatcccag ctgactccag gtggcaccca agatgctgg     120
aatctttatg gcaaatgccg ttacagatgc tccaagaagg aaagagtcta tgtttactgc    180
ataaataata aaatgtgctg cgtgaagccc aagtaccagc caaaagaaag gtggtggcca    240
ttttaactgc tttgaagcct gaagccatga aaatgcagat gaagctccca gtgagttccc    300
acactccatc aataaacacc tctggctgaa aaaaaaaaaa aaraaaaaaa araraaaaaa    360
aagaaaaaaa actcaagggg gggcccggta cccattcgcc ctatgtnnnt cgt           413
```

<210> 551
<211> 1306
<212> DNA
<213> Homo sapiens

<400> 551
```
gaagctcgaa attaaccctc actaaaggga acaaaagctg gagctccacc gcggtgggcg     60
ggccgctcta gaactagtgg atcccccggg ctgcaggaat tcggcasrrg gcaagctgag    120
atcttcaacg cttcctacaa gaagtaccta gatagggagt gggaggaaga gccactcagg    180
accaagactc tgccagcagc tctccttgcc agggagtcta catggctctg aatcgtgtg    240
tctttctttc ccagtacggc caccttctat ttccttcttc ctagctgcct atttgcaatg    300
ccaccggaag tcaagggccc ctcaggcaag gagaatagca cttcataaag agaaggatga    360
tgaccccgag ggtgtgtggc cctgtgctgc gcccattgca gtctctcagc tcagctgctc    420
ctcctcctac ctggtgctgg cctgcgagga atggtgtgct cacgctgtgg gacctggcca    480
aaggattccc tcttggggtc gctgctcttc ctcaaggatg tttctgccaa agcattcact    540
tcctaaaata tttctcggtc cacaaaggac agaatatgta tcctgaaggt caagtgaaat    600
cccaaatgaa atgtgtggtg ctgtgcacag acgcctccct ccatctgtgg gaggctagcg    660
```

372

```
ggacccaagg  acccaccatc  agtgtgcttg  ttgagatgtg  ctcatctttt  ccaagaatgg     720
ctctgtgtgc  cttatggatg  tggccaagcg  tgaaatcatc  tgtgcctttg  cccctccggg     780
agcctttcct  ctggaggtcc  cctggaagcc  agtgtttgct  gtgtctccag  accatccatg     840
tttcctgctc  cgaggcctgc  ccactcctgg  aaaatatctc  aaaaaattgt  accattcctc     900
aaagggactt  ggataacatg  gccttccccc  aagcactgcc  actggagaag  agatgtgagc     960
gtttcctcca  gaagagctat  cggaagctgg  agaagaaccc  agagaaggag  gaggagcact    1020
gggcccggct  tcagaggtac  tccttgtcgc  tccagagaga  gacttcaag  aagtgaggct    1080
gccaccgccc  tgggatctct  gaaaaggagg  tttcagccac  gaggcagctg  cttccaggac    1140
actgaggcca  agagaaatgt  aacagarcca  cagctccaca  ggcctgcact  cggagtctgg    1200
ggcctctgca  gaaccagcaa  ggggaaaagt  ataatctggg  ggaccttcaa  ccactaagcc    1260
tcttgtcaga  accctcaggc  agggcagatg  tgtcaccaaa  taaaac                    1306
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<210> 552
<211> 754
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 552
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natcctccac  atccttccat  ggctctgaag  aataaattca  gtgtttatg  gatcttgggt      60
ctgtgtttgg  tagccactac  atcttccaaa  atcccatcca  tcactgaccc  acactttata     120
gacaactgca  tagaagccca  caacgaatgg  cgtggcaaag  tcaaccctcc  cgcggccgac     180
atgaaataca  tgatttggga  taaaggttta  gcaaagatgg  ctaaagcatg  ggcaaaccag     240
tgcaaatttg  aacataatga  ctgtttggat  aaatcatata  aatgctatgc  agcttttgaa     300
tatgttggag  aaaatatctg  gttaggtgga  ataaagtcat  tcacaccaag  acatgccatt     360
acggcttggt  ataatgaaac  ccaattttat  gattttgata  gtctatcatg  ctccagagtc     420
tgtggccatt  atacacagtt  agtttgggcc  aattcattt  atgtcggttg  tgcagttgca     480
atgtgtccta  accttggggg  agcttcaact  gcaatatttg  tatgcaacta  cggacctgca     540
ggaaattttg  caaatatgcc  tccttacgta  agaggagaat  cttgctctct  ctgctcaaaa     600
gaagagaaat  gtgtaaagaa  cctctgcaaa  aatccatttc  tgaagccaac  ggggagagca     660
cctcagcaga  cagcctttaa  tccattcagc  ttaggttttc  ttcttctgag  aatctttaa     720
tgtcatttat  atacaaaaga  aattctcaaa  tgtt                                  754
```

<210> 553
<211> 1028
<212> DNA
<213> Homo sapiens

<400> 553
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gcatgatcct  gtggaacaca  gtttgggatc  atagatcga  attaagacac  caccgagata      60
cgggctgtga  ggttcatacc  gtgctgatag  cactcgtggt  gtctgtgaaa  tgtgggtaag     120
acattcaaac  ctggttttga  tactggaaac  tcttccttta  aaactgtgac  catgatttca     180
ttcagcccct  ccacaccct  atgtctgcct  tgtttcagag  tgagttttct  atggagcctg     240
tggccctttt  gcagcccacc  tggtggcttc  ttaatgtaac  tcttcccctg  gtcgcctgga     300
gtggaccact  catctgcagg  cctctcctgc  atggggaggg  taggcaggga  gcagcatgtc     360
tgcagggtg  aacctttgct  cttctgtcag  gcgaggccca  ggctgcacca  gccacctgcc     420
acatggtgac  agtgccacgg  gccctgcgta  tggcccctgc  aaccgtgctc  tggcgggcac     480
acctggctgc  tgcaggccaa  ggccgctgtt  cagtgaagag  tcccatgttt  agtatggact     540
aaagtcccat  gtttagccay  tgccccagtc  tcccgtgacc  ccagaaacca  ggtcactgga     600
ccacagtgcc  agatcctcat  cacgccggtg  agcacctaga  agtgagaaca  ctgtattcct     660
acaatgtaca  cttggatatt  tctccttatt  tagtttctag  tgaaacaaat  caagtaagga     720
actatcttta  gtttagatgg  aattatttgt  ttttaattgt  tgccgtattc  atctatatag     780
ctaatatttc  aagataagta  atgaacaaaa  cctgtctaaa  ccttttgttt  ccaatgaatg     840
```

373

```
aaagtcatgc actttatttta taggctctat gttttggctt ctgcagtact tttattatct      900
atacataatt tggccaaaaa taagaaattg gaaagaatga aatgtttagt ttatagtaga      960
agaaagatga tgacactaag ttgtgaaaat atgttgtgat ttttatgaaa taaactcacg     1020
gcacgtag                                                              1028
```

<210> 554
<211> 450
<212> DNA
<213> Homo sapiens

<400> 554
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tttttttact cgaaaaaatg tttaatagaa tttaaaattt taacttcagg gaatttggaa       60
gttcaatcat tctcaaagag gctgtaagga tgattaaaat cctgaaggaa gccattgaag      120
aaacttcctt ctgctctttc tggaggatct cttttcaatt atctattcat catatatttc      180
ttatcttctg tgcacaattg acaactcttc tttacagcac attcctcctty attcccatct      240
cttggtttct gattgttcct ggggctgtgg ataaaaccat tctctgagaa gctgataagc      300
aattggatga gaaagargga gargaaaact ggcaggarga tctggsccca tgcccgagc      360
cagcacatct ctcttcagac ctggtgaccc cagccactgg gaacctggca ggcaccagct      420
acagtgttgg acactgctcg tgccgaattc                                       450
```

<210> 555
<211> 978
<212> DNA
<213> Homo sapiens

<400> 555
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ggcacgagcg gtttccgcgg tggccagac tgcggccgtg ttcttcggct gcgccttcat        60
tgccttcggg cctgcgctcg cccttttatgt cttcaccatc gccatcgagc cgttgcgtat      120
catcttcctc atcgccggag ctttcttctg gttggtgtct ctactgattt cgtcccttgt      180
ttggttcatg gcaagagtca ttattgacaa caaagatgga ccaacacaga aatatcgct      240
gatctttgga gcgtttgtct ctgtctatat ccaagaaatg ttccgatttg catattataa      300
actcttaaaa aaagccagtg aaggtttgaa gagtataaac ccaggtgaga cagcaccctc      360
tatgcgactg ctggcctatg tttctggctt gggctttgga atcatgagtg gagtattttc      420
ctttgtgaat accctatctg actccttggg gccaggcaca gtgggcattc atggagattc      480
tcctcaattc ttcctttatt cagctttcat gacgctggtc attatcttgc tgcatgtatt      540
ctggggcatt gtattttttg atggctgtga gaagaaaaag tggggcatcc tccttatcgt      600
tctcctgacc cacctgctgg tgtcagccca gaccttcata agttcttatt aggaataaa      660
cctggcgtca gcatttataa tcctggtgct catgggcacc tgggcattct tagctgcggg      720
aggcagctgc cgaagcctga aactctgcct gctctgccaa gacaagaact ttcttcttta      780
caaccagcgc tccagataac ctcagggaac cagcacttcc caaaccgcag actacatctt      840
tagaggaagc acaactgtgc ctttttctga aaatcccttt ttctggtgga attgagaaag      900
aaataaaact atgcagatat gcaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa      960
aaaaaaaaa aaaaaaaa                                                    978
```

<210> 556
<211> 1075
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (79)..(79)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (604)..(604)
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<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (656)..(656)
<223> n equals a,t,g, or c

<400> 556
gtgtcgcagc tctcttcgac gtacctgtcc tcaggagccg cggcggcgac tgcgcctcgg      60
acggccgtcg gggccgagna accatgagcc ccaggggcac gggctgctcc gccgggctgc     120
tgatgactgt cggctggctg cttctggcgg gcctccagtc cgcgcgcggg accaacgtca     180
ccgctgccgt ccaggatgcc ggcctggccc acgaaggcg gggcgaggag gagaccgaaa     240
acaacgacag cgagaccgcg gagaactacg ctccgcctga aaccgaggat gtttcaaata     300
ggaatgtcgt caaagaagta gaattcggaa tgtgcaccgt tacatgtggt attggtgtta     360
gagaagttat attaacaaat ggatgccctg gtggtgaatm caagtgtgtt gtacgggtar     420
aagaatgccg tggaccaaca gattgtggct ggggtaaacc aatttcagaa agtcttgaaa     480
gtgttagatt ggcatgtatt cacacatctc ccttaatcgt ttcaatatat gtggaactty     540
taagacagac cacaatccat tatacttgta aatgattcag caatcctaga agtacgcaag     600
gaangtcacc ccttgctttc gagtgtgaca cadggataa taatgaaata gtagcnacta     660
ttaaattcac agtctatacg agcagtgaat tgcagatgag aagatcaagc ctaccagcca     720
ctgatgcagc cctaattttt gtgctgacca taggagtcat tatctgtgta tttataattt     780
tcttattgat cttcataatc ataaattggg cagcagtcaa ggctttctgg ggggcaaaag     480
cctctacacc tgaggtacaa tccgagcaga gttctgtgag atacaaagat tcaacttctc     900
ttgaccaatt accaacagaa atgcctggtg aagatgatgc tttaagtgaa tggaatgaat     960
gatgtttgaa tgatatataa caaaccaaag gatattacag aatattagat tcattattac    1020
aaaaataaaa tacacattga aatactttaa aaaaaaaaa aaaaaaaaa ctcga          1075

<210> 557
<211> 738
<212> DNA
<213> Homo sapiens

<400> 557
ggtacaggac tgagaagcag ataacaagag tgacgctcac agggctgggc tgacgctaac      60
aggaggcagt gtgtggctcg aagattcttg aacccacagc agcagctgcg gccaccccat     210
cctgcccaca gctccagccc tgagacgacg aggaggagag tcgactttgc ctcttgccca     180
agggaccatg cccaggtgcc ggtggctctc cctgatcctc ctcaccattc ccctggccct     240
ggtggccagg aaagacccaa aaaagaatga gacgggggtg ctgaggaaat taaaacccgt     300
caatgcctca aatgccaacg tgaagcagtg tctgtggttt gccatgcaag aatacaacaa     360
agagagcgag gacaagtatg tcttcctggt ggtcaagaca ctgcaagccc agcttcaggt     420
cacaaatctt ctggaatacc ttattgatgt agaaattgcc cgcagcgatt gcagaaagcc     480
tttaagcact aatgaaatct gcgccattca agaaaactcc aagctgaaaa ggaaattaga     540
ctgcagcttt ttggtaggag cacttccctg gaatggtgaa ttcactgtga tggagaaaaa     600
gtgtgaagat gcttaatggt gttttgaggc atccctccaa cctctgtgac tactttatcc     660
atgaaaatga agcaatggca ggtgggaggc tcttcccaat gtgctttctt caaaaaaaaa     720
aaaaaaaaaa aaaaaaa                                                     738

<210> 558
<211> 752
<212> DNA
<213> Homo sapiens

<400> 558
gatcaaatcc tgaagtggta catgtcacta ctgttcatag tctctttgct ggaacttggt      60
cctatggccc tactggcaga gaggaaggct atgaaaccca gtctaggcct gcgcctaga     120
gaagaagaag aagaaacacc ttttgaagaa cagagagcag tctctgtcat accaggrgta     180
cctgtcacat acttgtagaa caaaaataag taacatttta attattgaaa caatgtaaca     240


375

```
actttaaaca cagtttcata actaggagtg aatcacccat aatctcatac ccggaacaaa    300
atatctgtta gtatgatgca ccttacata gctgtaatct taaagggcat gtacttcctt    360
ctttgctttc cttttttttt ttcttcatcc tttccctctc tccctctctc cctctctccc    420
tttctccctt ccttctttct tttcttcctt tctttctgat tttctaactt ccttctttaa    480
acattccttg atcgtctgtg ggtctggaca gcaacatgga gatcaattag gcgagcatt    540
ttaaatttgc cctcaagaag ttccactagt gtaagagtag gcaagtaacc aattattaca    600
atagtgggac aagcgctgtg atagaaataa atacagagta ctgtggcagt ccttacccag    660
aaaaagatat ctagggtaga tggtatctga actgagaatt aaagaataaa tagaagatag    720
catggcaaaa aaaaaaaaa aaaaactcgt ag                                   752
```

<210> 559
<211> 1748
<212> DNA
<213> Homo sapiens

<400> 559
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ggcacgagta aagacaaaat aaattcttct gtccacttat ttacctaaca tacacttgct     60
tccttggaag tcataggcat ccacatatct tcagccacaa cttggtattt caatataat    120
tcttattttt gaactcctaa actttctggt agaaatcttc agttgaaaat atcctggcaa    180
gtaaaattag aaactcccag aaatgtactt atttctatta tgttgtttta tttctgaaca    240
ttgtgcccaa cattcttttc cacatacttg cccaaattgg aaaactaggg ttctaagttt    300
ccccctccat ccatgccac atttaattca ccctaataat acctgacatc tttcaagttc    360
attttctact atctatcccc acgcaggcca tatctgggtt gaagcttcat tatctctata    420
gattaaaaac aaaaacaaaa tgcatacaag caaaacaaat aacatacaaa caaaacccac    480
ctaactcatc tttatgtagt cagtcctccc tcaatagttt ggccaaatt cctaaaccga    540
aatctgattg tgactatccc cttctaaatg tatttaatca gcatacccct tcaataaatc    600
cattaaccgt tcttgttatc caagacagtt tgtcatctgt cttggataac aagttgcaga    660
ctccatccaa tgccattttc ccctagaaat atagataatg gcactatagg aacaatgatc    720
tccacatgcc tcatgcattg gtaattttttt taacctttgc tagaaatgtt ctgctccact    780
ctactcatcc accacccatt ctactccacc ttacactacc tcttttccca tttagatctt    840
ccattctata tctccttgca tgaaattgtc catacctgct tagtactcat ctcattattt    900
tgtcattgtg cgcatatctg ttcatatgat ttcttatgga gttattaag tattttgatt    960
tctgtttcag tcagatttcc aacagagaag tagaaccagt agaaaatata tcttaagata   1020
cttattggag ggaattaact tacatggttg tgggaaccgg catagccgac ctaaaattta   1080
tatggctgac tatcaaaaaa gacaggctgg aactcttagg cacaggcaga agttgcagtt   1140
cacaggtgaa atttgttctt tatcctggaa gcctgggctc tgctctttag atttagcagc   1200
tgactgaatc aagtccacct agattaccta ggataatctt gtttacgatt atgattatca   1260
ctaccagtta tcaactgatt ttgaacttca ttcacatcta caaaatacct tcataggaac   1320
atctagatca gtgttggatt aaataactat cagctgagc ctagccatgt tgacccatca   1380
aaagaccatc acaattgctg atataacttt aataaaattt gcaacatttt cagatggaag   1440
aattgagaaa agggaagcgg gctgactttt cattttagaa tttattatgc attaacttaa   1500
agtaagtaat aattatgtag gtgatcattt tgatatttta acctacttaa tttagaaaat   1560
catttaaaat catttttgtt aagactacaa aatgattttg ggtaaaaaaa aattttacca   1620
aatatcaaga tcacaataat cacttaaaat agttacatat gtaactaacc tgcacaatgt   1680
gtacatgtac cctaaaactt aaagtataat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1740
aaaaaaaa                                                            1748
```

<210> 560
<211> 1094
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 560

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nacccattga gcagaaggag gccaggtggg aaagctcctg ggaagagcag ccagactgga      60
cactgggctg cttgagtcct gagtcacaat tcagaattcc tgggctccct gggtgcattc     120
tatcattcca gttgaaagtt tgcttccttc cagtcatgtg gctcttcatt ctactctcct     180
tggctctcat ttcagatgcc atggtcatgg atgaaaaggt caagagaagc tttgtgctgg     240
acacggcttc tgccatctgc aactacaatg cccactacaa gaatcacccc aaatactggt     300
gccgaggcta tttccgtgac tactgcaaca tcatcgcctt ctccctaac agcaccaatc      360
atgtggccct gagggacaca gggaaccagc tcattgtcac tatgtcctgc ctgaccaaag     420
aggacacggg ctggtactgg tgtggcatcc agcgggactt gccagggat gacatggatt      480
ttacagagct gattgtaact gacgacaaag gaaccctggc caatgacttt tggtctggga     540
aagacctatc aggcaacaaa accagaagct gcaaggctcc caaagttgtc cgcaaggctg     600
accgctccag gacgtccatt ctcatcattt gcatactgat cacgggtttg ggaatcatct     660
ctgtaatcag tcatttgacc aaaagagga gaagtcaaag gaatagaagg gtaggcaaca      720
ctttgaagcc cttctcgcgt gtcctgactc caaaggaaat ggctcctact gaacagatgt     780
gactgaagat tttttttaatt tagttcataa agtgatgcta caacagaata atcaccatga     840
caactggccc acacctcaga gactgattct gatctcccag gaattctgaa ggacctcta      900
tccttgacaa caatcatttg cagccaggta gcaacggcgg tagtcagagg agctatgata     960
gaccacaccc aagcaaggct gccctcaaat aacatctcaa gatcttagtt cttatgcatt    1020
ccatcagtca gaagtgaaga agaggtggag aatctggatt ggggaccagg aaatcacttg    1080
tattttgtta gcca                                                      1094
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<210> 561
<211> 531
<212> DNA
<213> Homo sapiens

<400> 561

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gttctaattc actgcccaca gccctgctga taaaagcaaa gctcatctct gccgtgctgc      60
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atgaaacttc tttacctgtt tcttgccatc cttctggcca tagaagaacc agtgatatca     180
ggcaaacgcc acatccttcg atgcatgggt aacagtggaa tttgtagggc ctcttgcaaa     240
aagaacgaac agccctacct ctattgcaga aattgtcagt cctgctgcct ccagtcctac     300
atgaggataa gcatttctgg caaagaggaa aataccgact ggtcttatga gaagcagtgg     360
ccaagactac cttgagtgct ggtgattacc attctcaagc tctctgggca cagagacctg     420
ctgtcaaccc ccctcattaa aattcatgtg cctgctaaaa aaaaaaaaa aaaaaaaaa       480
aaamaaaaaa aaaaaaaama maawaamwaa amawaaaaaa aaaaactcgag               531
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<210> 562
<211> 813
<212> DNA
<213> Homo sapiens ·

<220>
<221> misc_feature
<222> (16)..(16)
<223> n equals a,t,g, or c

<400> 562

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gaccaccaaa gactcagcct ttcacatcat gtcccacgag agcccaggca tcgagtggct     180
ctgtctggag aatgccccat gctatgacaa tgttccccaa ggcatctttg cccctgaatt     240
cttcttcaag gtgttggtga gcaatagagg agtggacacg agcacctactgcaactacca    300
gctcaccttc ctgctgcaca tccacgggct gccactcagt cccaagcggg ccctttttcat     360
catcatggtg tcagctagcg tgtttgtggg cctggtgatc ttctacatcg ccttctgcct     420
cctgtggccc ctcgtggtga agggctgcac gatgatccgg tggaagataa acaacctcat     480
tgcctcagaa tcctactaca cctacgcctc catttccgga atctcgagca tgccatctct     540
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377

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gagacattcc aggatgggct ccatgttcag ctccaggatg acagaggaca gggctgaacc      600
caaggaagcc gtggagagac agttgatgac ctgagtgtcc cacctgcccc agcccccagt      660
tactgtcacg cctctcttat gaggcccatc ttgaagatgc aactgtcac ccagcccagg       720
cctctctttc tgttttgctt gatgtttact tctcgttcag actcaaataa agcctttttt      780
caggaccaaa aaaaaaaaaa aaaaaaactc gag                                    813


<210> 563
<211> 1713
<212> DNA
<213> Homo sapiens


<400> 563
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gataaagatt tctctgaaaa aaagaagcat gtcaggaatc tctgggtgcc ccttttcct       180
ctggggactt ctagcattgt tgggcttggc tttggttata tcatgatct tcaatatttc       240
ccactatgtg gaaaagcaac gacaagataa aatgtacagc tactccagtg accacaccag      300
ggttgatgag tattatattg aagacacacc aatttatggt aacttagatg atatgatttc      360
agaaccaatg gatgaaaatt gctatgaaca aatgaaagcc cgaccagaga aatctgtaaa      420
taagatgcag gaagccaccc catctgcaca ggcaaccaat gaaacacaga tgtgctacgc      480
ctcacttgat cacagcgtta aggggaagcg tagaagccca ggaaacagaa tactcatttc      540
tcagacaagg atggagatga gcaactacat gcaatagatg ccagcgtttc taaaccacct      600
tagtagacag tttctccccg aaagccaggc gtagaggaa acattcatga tgatcccatc      660
gactgtttgg attgatccgt gctaagagaa acctattaac tagctggacc atgatctgtt      720
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tatactaaaa attaataaga cccagcttga aaattgagcc tgataacaag attacaaatt     1020
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ttagaagaaa aataaaagcc aatgagtttt tttttaattc tcctttctca ccaatgggca     1140
atagcccata attgaaataa atttctgatt gaaaggtata ggaaacatta aaatgcatta     1200
ctaagagaag taatataatt ttcttacaaa gtatttttcc caaagatagc tttactattt      260
caaaaattgt caaattaatg catgctcctt acaacaaaca aatatcaaaa agagtttagg     1320
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tttcactgtt atatttaact atatataaat acgcatatat tgtaatttta atgtctgctt     1560
agcaccccac tgataaccaa atcacagttt atttaaataa ttttaatgac ttttcaaaaa     1620
caatttattg atgcaaaaag caaggttgag atgacaatgt ttctttcaat aattaaaaa     1680
tactgcttca ctgtcaaaaa aaaaaaaaaa aaa                                  1713


<210> 564
<211> 703
<212> DNA
<213> Homo sapiens


<400> 564
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ggtgagatgg gaagctgcag ttggaagacc ctggaggatg cctgacaagg ggatgtctga      180
cacatgattg gagctctttt tgaaatgttt cttgcccttc ctggagcaga ggagccatta      240
tttatgcagg tacatcgaag tcttttgacc tccatacagt gattatgctt gtcatcgtg      300
gtggtatcct ggcggccttg ctcctgctga tagttgtcgt gctctgtctt tacttcaaaa      360
tacacaacgc gctaaaagct gcaaaggaac ctgaagcgtg ggctgtaaaa aatcacaacc      420
cagacaaggt gtggtgggcc aagaacagcc aggccaaaac cattgccacg gagtcttgtc      480
ctgccctgca gtgctgtgaa ggatatagaa tgtgtgccag ttttgattcc ctgccacctt      540
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gctgttgcga cataaatgag ggcctctgag ttaggaaagg tgggcacaaa aatcttcatg      600
agcaatactt cttagtagat tgtttttgtta ttcaaatcaa gttctagtgt ttttatgtga      660
gattatataa tttacagtgt tgttttatat acttttgaat aaa                         703


<210> 565
<211> 848
<212> DNA
<213> Homo sapiens

<400> 565
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agaagtaacc catttaacta aaaccagctg gttggcccca ctcagattta tcaaagggtt      120
actgggtccc tggggtgga tattgcttat attagactta gaatagcata ctgttttaat       180
attatatgaa ctaaaatgtt tctttaaaaa aagagtggtc tgttaatgga tttatgtagt       240
ggtcaagaat ttagacttca gagtcaaata aacctatatc agtcctagtc ctacagttta       300
ctaattgtga gatgtcaagc aagtttttga actcctctaa gcctctgttt tttatctat       360
aaattaataa atgaatgaat cgggttgagt gaatatttag taaattctta gtacatacta       420
gttatttgta actgtgagac tggttttttg gtatggtttt cacatttggg agtagaaata       480
ccacttccta aagtctgttt tatctcaaat tctctatcca ggcatagtgt aaagtgaaat       540
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gctagcactt cggaaggctg aggcgggcgg atcacttgag gtcaggagtt ggagaccagc       660
ctggcaaaca tggcgaaacc ctgtctctac taaaaataca aaaattagct ggatgtggtg       720
gcaggtgtct gtaatcccag ctacttagga ggctgagaca ggagaatcc ttgagaattg       780
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aaaaaaaa                                                                848


<210> 566
<211> 1818
<212> DNA
<213> Homo sapiens

<400> 566
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aaggccagag cgtgtgcatt tgtggctttg gttgacatca ccaagtcgcc cttcctgggg      120
cctgtgctgg tgtactctga ggcgcgattg tgtgaaaggt gggctaaggt gcctgttcga      180
ccacatcctc actggtagac tgggtcacca cagttttgga aaggtggaa atggtatcta       240
aacatagttt gaatttgcat ttctttact ggaagggagg ctgcgcgtgt ttcacatcag       300
agccacgtgt gtttgtggtt gttgaacttt ctctcttgga ttgctaggag tgctttatgt       360
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tgttatttgt ctttttaaatt tgtttttgca tttgtctttt cactttgatt tttgccaggc       480
tggagttttg atgtttatgt ggtcataggt gtgaatattt tcttttgtgg cttctggatt       540
ttgagacaca gtggctatag aaccactata gccaaaagtt atgtttgctt ttggtttcat       600
atactttgct ttggtcctgt cttcttgact ttatttaaaatagtaagata ttcttactac       660
attttttccat tgcccatagc tggaaggaga ttgcaattat caccaaagat gaaaaactaa       720
ggcatgttct cagcagaggc agattagact ttaagttaga ggcttgtcct tggtgcagag       780
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cagggaagat ctctggcttt gctgggagct ggggtacggt cttagagtg ccattctaga       900
gtggcttcgc gtactggtaa tgaacgccca tcaagtggcc ttgggaattc atgagccgga       960
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379

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ctgccctctc cagataattc tgtcactgaa cttcaaactg tcaatggaac gatagcgcag   1560
tctcttaaca atgcttcagg acagataata gagctgtgcg ggcagcctcg gtgacagtgt   1620
tgggaatctg cagaatggct ttgtccactt ctttcctttc agaggagaca ttgagcctcg   1680
gcatggtgtc tcacgccagg aatcccagca tgttgggagg ctgaggttgg gggatcggat   1740
tgcttgaggc taggagcttg aggtcagcct gcgcaacata gtgagacccc tgtctctacc   1800
aaaaaaaaaa aaaaaaaa                                                 1818


<210> 567
<211> 1632
<212> DNA
<213> Homo sapiens

<400> 567
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ccgtcatggg gatccagacg agccccgtcc tgctggcctc cctgggggtg gggctggtca    120
ctctgctcgg cctggctgtg ggctcctact tggttcggag gtcccgccgg cctcaggtca    180
ctctcctgga ccccaatgaa aagtacctgc tacgactgct agacaagacg actgtgagcc    240
accacactct ggggctgcct gtgggcaaac atatctacct ctccacccga attgatggca    300
gcctggtcat caggccatac actcctgtca ccagtgatga ggatcaaggc tatgtggatc    360
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ctcagtacct ggatagcctg aaggttgggg atgtggtgga gtttcggggg ccaagcgggt    480
tgctcactta cactggaaaa gggcatttta acattcagcc caacaagaaa tctccaccag    540
aaccccgagt ggcgaagaaa ctgggaatga ttgccggcgg gacaggaatc acccaatgc     600
tacagctgat ccgggccatc ctgaaagtcc ctgaagatcc aacccagtgc tttctgcttt    660
ttgccaacca gacagaaaag gatatcatct tgcgggagga cttagaggaa ctgcaggccc    720
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tggacaaact gggctactca caaaagatgc gattcaccta ctgagcatcc tccagcttcc    960
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agagggaaac agctactgat aatcgaaaac tgctgtttgt ggcaggaacc cctggctgtg   1560
caaataaawr kgctgaggcc cctgtgtgat attgaaaaaa aaaaaaaaa aaaaaaaaa      1620
aaaaaactcg ag                                                        1632


<210> 568
<211> 1061
<212> DNA
<213> Homo sapiens

<400> 568
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cctgtactca gagccctggc tgcttcctgc ctggcctctc ctgcgggctg ctgtggaacc    180
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ctcgtcttta tttcttttt agttttgtcg gggttggctt gatagatgtt agtccatcat     360
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ttagtggaca tcagagtcac tagtcaggat gaaagagttc ttggctttaa ctcccagaaa    480
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380

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tggggtggtc tgtgaatcac agtttgggag acattgactt ttagggagtt tgttctgaat      600
tcactagata atagagatat aatacagagc tttgaaagct ggtgtcttga tgacagagcc      660
gtggcaatgg ggagggttga ggaggtggct gttgggcctg tctcctggtg agagttgaaa      720
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cgccacacag gagtactctg cgccctggca gggtctgaat acacgtggga gtggtgagag      840
ggagaacttt aagtccaggt tttgtgcctc agtgacttag tgtggccata tcattagaaa      900
tgtgttgagg ccgggcacag tggctcatgt ctgtaatccc agcactttga gaggctgagg      960
caggaggatg gcttgaggcc aggagtttaa aaccagcctg gacaacatag tgagagcctg     1020
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<210> 569
<211> 1650
<212> DNA
<213> Homo sapiens

<400> 569
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<210> 570
<211> 2762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2711)..(2711)
<223> n equals a,t,g, or c

<220>
<221> misc_feature

<222> (2730)..(2730)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2752)..(2752)
<223> n equals a,t,g, or c

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tggtgccgcc ggctgcgctg gggctggtgt cttcccggac cagcggtgca gtcccgccaa   180
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tccttgacgc ttttggcctg ctggagagcc gcctggatcc ctacctgcgt agcctagagc   420
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aagaagtcca cactatgttg cgcggagtct tgttctttag cacccccaga accttccaag   540
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tctacgctgt catcctgtcc agtgagttct ggccgcccct caaggacgag aagctggagg   1860
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tgtcccagaa tgcactgctg aggagcatgc ccacccccac ccccgcagtg tgcagattaa   2604
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aaaaaaaaaa naaaaaaaaa aaaaaaaaan aaaaaaaaaa aaaaaaaaaa anaaaaaaaa   2760
at   2762

<210> 571
<211> 956
<212> DNA
<213> Homo sapiens

<400> 571
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cccccatgtg gccactgtcc tcagacagct cctggagctt gtggataagc actggaatgg     180
ctccggctcc ctcctcctca acaagaagtt tctcggtcct gcccgagatt tgcttctgtc     240
tttggtagtc ccggstcctt ctcagccgag gtgttgctca catcctgaag acacgatgaa     300
agcattctgc aggagggagc ttgaactgaa ggaggctgcg cactggtccc taatgacatg     360
gaaagtttga agcaaaaact ggtcagagtg ctggaggaaa acctcatttt gtcagaaaaa     420
attcaacagt tggaggaagg tgctgccatc tcaattgtga gtgggcaaca gtcacatact     480
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gagcttgccc agctgaaaaa gctggagaag acagttgcca ttctccatga aagtcagaga     600
tccctggtgg taactaatga gtatctgctg cagcagctga ataaggagcc aaaaggttat     660
tccgggaaag cgctcctgcc tcctgagaag ggtcatcatc tggggagatc atcgcccttt     720
gggaaaagca cgttgtcttc ctcctcacca gtggcacatg agactggtca gtatctaata     780
cagagcgtct tggatgctgc ccagagcct ggcttataga gctagcatgg aactcacacc     840
acagcttccc tggtccacag aggstctcac cgccattgca ccagtatggt ggtatgtact     900
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<210> 572
<211> 1216
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1028)..(1028)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1070)..(1070)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1087)..(1087)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1090)..(1090)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1157)..(1157)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1193)..(1193)
<223> n equals a,t,g, or c

<400> 572

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cgcctggtct tggacttcca gcctccagaa ctgtgagaaa cacggggatc accatccttc    120
aagacctgat ggccggtgtc tggaacacca ttgctttatg gtttttgagt gtttttggag    180
tcatttcagc ccccacgact gggaccagtc caaccagctg caggtgcgtg gggccggagc    240
ctccaggctg tgggccagcc ggctgacgga tgactccatg aggctcttgc aggacaagga    300
ccagctgacg caccasatgc aggagggcac ctgccggaac ctgggccaga ggctgtcgga    360
cattggcttc tggaagtcag agctgagcta tgagctggac aggcttctga ctgagaacca    420
gaacttggag acggtcaaga ggcggmtgga gtgcgcggcc aatgaggtga actgcccatt    480
gcaggtggcc ttggagtgtc tgtaccatcg agagaagagg attgggattg atttggtcca    540
tgacaacgtg gagaaaaacc ttatccggga agtggatttg ctaaaatgtt gccaagaaca    600
gatgagaaaa ttagctcaaa gaattgatat ccagatgcgg gataaccggg agctcagca     660
cgtgctggag agggacctcg aagacaaaag ctcggcccag tgtatcgatg agaagtgctt    720
taacctgaga aatacgtcag actgcatcag cttcttccac ggcatggaga aaattgacgg    780
cacgatctcc gtacctgaga cctgggccaa gttcagtaac gacaacatca aacactcttc    840
agaacatgcg ggccaaytcc atccrgytgc gggaggaggy ggagcacctc tttgagacct    900
tgtcggatca gatgtggagg cakttcacag acaccaacct ggccttcaac gcccgcatct    960
ctgaggtgac ggatgtgaaa gaataagctg cagacccact ggcgaacatg ggacctactg   1020
gctagctnac ctatgcttca gctttgacat ctgctggcct tcttctggn ccagctcctt   1080
tcatctncan ctttggggcc cgacagacgc tgaagagaac tttcaggccg agaacaccat   1140
catgctgctg gaaaggncca tcatgggcaa ggagggccgt tgaagtgggc canacaagct   1200
ggatgccgga cccgct                                                   1216
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<210> 573
<211> 818
<212> DNA
<213> Homo sapiens

<400> 573

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aaaacttgag tatgttgagg gaaggaatat atatatatct gggagagaat ggatacgttt     60
tgttttctg aaatggaatt agaaagatgt tcagttgtct tgtgcattct tgcaaacctt    120
gcagttttga gagccctgtt tctgccttgt atcattttcc actgtgatc kgattctagg    180
agcgtgaaca gggagacaaa ggtgaagttt gtgcacacct ctgtccatgg ggtgggtcat    240
agctttgtgc agtcmgcttt caaggctttt gmccttgttc cycctgaggc tgttcctgaa    300
cagaaagatc cggatcctga gtttccaaca gtgaaatacc cgaatcccga agagggaaa     360
ggtgtcttgg taacctaatt tttttttaaa ttatgaaatc tgcttttata ttcaaaacta    420
ttactgtcaa gtaaaataca tttttatgtg ttttcattgt gctgaagaaa aactaatttc    480
agcatggaaa tatgtatgtt tggctgggtg cagcgtctca tgtctgtaat cccagcactt    540
tgggagacca aggcaggcag atcacttgag gtcaggtgtt cgagaacagc ctggccaaca    600
tggcaaaacc ctgtctctac taaaaataca aaaattagct gggtgtggtg tacatgcct     660
gtaatcccag ccacttggga ggctgaggca ctagaattgt ttgaacctga gagatggagg    720
ttgcagtgag ctgagattgc accactgcac tccagcctgg gtgacagggt gacagagcga    780
gactctgtct caaaaaaaaa aaaaaaaaaa aactcgag                            818
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<210> 574
<211> 712
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (565)..(565)
<223> n equals a,t,g, or c

<400> 574

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gaattcggca cgagctggac aggaccggag aggacccgc gtaaccgcgg aacagacact     60
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cccggcagcg gccgccgccg cggcactgct acgggacgag ccggagcgct tggccatggc    120
ggcccgatcc gcactggcgc tgctgctgct gctgccagtc ctgctcctgc cggtgcagag    180
ycgctcagag cccgagacca ccgcgcccac ccctacccca atcccgggtg gcaactcgtc    240
aktgagcagg cccctgccca gcatcgagct ccacgcctgc ggcccatacc ccaaaccagg    300
cctgctcatc ctgctggccc cgctggccct gtggcccatt ctcctgtagg gacgcccagc    360
cagccacctc taagtcgccg ctgggactgg cctgccccat tgagcaacag agacgcttga    420
cagccgcccg cctccattcc ttgacttcac cagaaatgg gtccagaaaa ctgaatccca    480
ccagcactgg tttggagcaa ccggacaccg aggtttcacc tccaggrtt ccatggaaga    540
gcctcaatgg agatgccaca tcctnactga gttaaagatg ggctgaggaa cttgggtacc    600
cacaagtytg ccttgggrat caaaagaaaa tatttacctt tagtttggtt cattaaatgc    660
atgaagtcaa aatatgaaaa aaaaaaaaa aaaaaaaaa aaaaaaactc ga               712
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<210> 575
<211> 2248
<212> DNA
<213> Homo sapiens

<400> 575
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atcatgatcc tgaccatgct gctgatgctg aagctgtgca ccgaggtccg tgtggccaac    180
gagctcaacg ccaggcgccg ctcctttaca gctgcagata gcaaggatga agaagtcaag    240
gttgcccccca ggcggtcctt cctggacttc gacccccacc acttctggca gtggagcagc    300
ttctcggact acgtgcagtg cgtcctggcc ttcacgggcg tggcgggcta catcacctac    360
ctgtccattg actccgccct gtttgtggag accctgggct cctggctgt gctgaccgaa    420
gccatgctgg gtgtgcccca gctttaccgc aaccaccgcc accagtccac ggagggcatg    480
agcatcaaga tggtgctcat gtggacagt ggtgacgcct tcaagacggc ctacttcctg    540
ctgaagggtg cccctctgca gttctccgtg tgcggcctgc tgcaggtgct ggtggacctg    600
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gtgcacccca ctggcaccaa ggccctctga cagtggggag gacgaggatg tgggagcc    720
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caggtgtggc agagatgggg cacgggcatt ggggtctcca tcagcctctg tggggtgtct    840
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gagaccctgt aaggcctgtg agcggagccc tcgaccccgt gacaccctgg cagacaccc    1140
tgcttggact ggggtggcct ctgctaccca ggggtctggc acgggggagg gctgggcctt   1200
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gacccttgtc accgcacgct ctgcccccac cccgttgcaa gaggtcacac catgtcagca   1860
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tctgtgccgg ggccgtggcc atgggaagat gttccacgct gcctcctcct cgagtttttcc   2040
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ctttgaaaat ttttatttt ttaagatgaa gcaagatgtc tgtagcggta attgcctcac   2160
attaaactgt cgccgactgc aggcgcagtg actgctgaat gtaccctgtg tggcgacttg   2220
gaatcaataa accatttgtg gatcctga                                      2248
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385

<210> 576
<211> 534
<212> DNA
<213> Homo sapiens

<400> 576
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ggggccgcct cctcaccggc ctggcctgcg gtgttgcctc cctagtggcc ccggtgagtg     120
tcccgtctct cgagtgtcct gtctcgcggc ctgagaccga gggggagtgg gacaaaccgc     180
tccccaggcc tggggcgcg gctccccctg gcgggacctt ctgggtgcca ggcttgaagt     240
ccctgcgtta tctcgcggtc cctcccgtcg accctgggaa ggatcctact gttctctcca     300
ttttacactg aggtcatgac atgcagtctc ggaaaggtga agtcctttgc ccaggcgagg     360
tccacagcta gtcagagggg aagcagttgc aggaacccag ggttgtccca cttagccgtg     420
cccytctttt gctctgcaaa ctgcggatga tccaaggag cccactccct acattttggt     480
tttcatccct ggcttcgggg tcaatgactg caattagcag gaagttcctg tcct          534
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<210> 577
<211> 1032
<212> DNA
<213> Homo sapiens

<400> 577
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tgcaggaatt cggcacgagg cgggccggga cgggcatggc cctgctgctg tgcctggtgt      60
gcctgacggc ggcgctggcc cacggctgtc tgcactgcca cagcaacttc tccaagaagt     120
tctccttcta ccgccaccat gtgaacttca gtcctggtg ggtgggcgac atccccgtgt     180
caggggcgct gctcaccgac tggagcgacg acacgatgaa ggagctgcac ctggccatcc     240
ccgccaagat cacccgggag aagctggacc aagtggcgac agcagtgtac cagatgatgg     300
atcagctgta ccaggggaag atgtacttcc ccgggtattt ccccaacgag ctgcgaaaca     360
tcttccggga gcaggtgcac ctcatccaga acgccatcat cgaaagccgc atcgactgtc     420
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acgagaccat ctcctgcaac aactgcacag actcgcacgt cgcctgcttt ggctataact     600
gcgagtcctc ggcgcagtgg aagtcagctg tccagggcct cctgaactac ataaataact     660
ggcacaaaca ggacacgagc atgagcctgg tatcgccagc cttaaggtgt ctggagcccc     720
cacacttggc caacctgacc ttggaagatg ctgctgagtg tctcaagcag cactgacagc     780
agctgggcct gccccagggc aacgtggggg cggagactca gctggacagc ccctgcctgt     840
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gctggccagg gccaggaggg cgggagggag ggaatggggg tgggctgtgc gcagcatcag     960
cgcctgggca ggtccgcaga gctgcgggat gtgattaaag tccctgatgt ttaaaaaaaa    1020
aaaaaaaaaa ac                                                       1032
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<210> 578
<211> 1074
<212> DNA
<213> Homo sapiens

<400> 578
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tagctggact gctgggcagg ggagctgtcc tagataaaat tggaaagaaa cagtgacca     180
gagacaggtg gacaaagaat tcggggactg atgggaactg agcttgggat ccagactgaa     240
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atttgagact tgtgcagctg ttctgccttc taggggccat ctccactctg cctcgggctg     360
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cttcgtctta ccctgcgcaa atctcctacc ttgtttcccc acccggagtg tcattgcct     600
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<210> 579
<211> 978
<212> DNA
<213> Homo sapiens


<400> 579
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tagctgggac cacaggatca caacaccacg tctggctaat ttttttttttt tttttttttt    180
tttttttttt gtagagatgg ggtttcgcta tgttggccag gctggtctca aactcctggc    240
ctcaagcaat cttccagcct tggcctccca aagtgctggg attacaggg tgagccacca    300
cktctggctt ggagggctta ttaaaacmcc gattcttagc ctcacccca gagtttctgg     360
ttagtaggtc ttggcagggc tggagaattk gaatttccac accttccttg gtgatgtgtt    420
gttggtagtt cagggagtac atgtgagagg aaccgtttag atagkaaaaa ctgcaaacct    480
gaagaagaat agaagaatcc ttattctgkg ctctcttaga tttagtttcc tcatctatga    540
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gaaggtggct ctaatctatt cattcaacaa cttcctattg agcacctgct atgtgccagg    840
tgctgttcta gccactaaga tagagcaggt aataacatag ggccattgtc cttatggaat    900
ttgtattgta gtggggtgaa taaaaaaggg cagtctaggt ggggcccgga aaaaaaaaaa    960
aaaaaaaaaa aaactcga                                                 978


<210> 580
<211> 300
<212> DNA
<213> Homo sapiens


<400> 580
gaccatatgt tgcaggaagt caaactggac ttttgtggc tataaattt gcctttaatc      60
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actggttgat tctgggaggc atctgctaca gtctctttttt atatggatat gtacatgtcc    180
tattctacaa aaatgattaa agataaaaac atacttgtat cccactgcta ctttagctgt    240
caaatttggt gtttcatcac attaaaagca ataaatcagt agttggtaat gtaaaaaaaa    300


<210> 581
<211> 1466
<212> DNA
<213> Homo sapiens


<400> 581
ggcacgagtg cctcaaagac tattatttgg gaggatctag tgcaaatgtt agtaatgtgg     60
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ttgccccaaa agatgatgct cacttatctt tcatccagtg taaggatatc tggaaagaca    180
acagaaagta tagctgtttt catttcaaaa gtgatcagct gcttgagcta gcaagcaagg    240
cttgcactag cttccaggcg cagtcacgca gtttcacagc aggcgcggtt ccctcggagc    300
acccagagct gccctgcggt agtcagcagt tgtgctgtgg ctgcactgcc aggctgggtg    360
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387

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gcargtggat cggagccagc agatgtggct caggaagtgc cttcttggcc tctccttaat    420
ctctttcaga stctgtgggc ccttgattgc actgtgggtt gtttcagact ccagtattag    480
gagactgaac cccttggtgg tttttggtg tgtgtcgct gagmtgggtt gaggacatgt    540
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tctgagtagt tctggcccca ctgctggagt atctgcccay tcagtttgtg agatggcagg    660
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attcccaagt taagtatttt ttctgtagct taattattac aggcttctgg tacctaagcc    780
ctttcttact ttctgttctg aggggaagag aagataatgt tgtttctccg cccccccgg    840
agtggcccca ggaccttgca tggcatttgc agcatttgca gcgtgcttgg gtttgcttta    900
ctagggtgaa agtgttgcac cccccagcac ccacaaaggc acctctgctc accctccggt    960
gaggttctga ctggccctgg gacatcacst gctccaggat cctatgtggc tcatcccagg   1020
agagatgtgg gagggaaggg gaaaaaaggc ttacatttgc tgagtggaat tcatgtagat   1080
ctgagttccg cattgattcc taagctgcag agcccttatg ccttggctgt tttgtgaatg   1140
ttagtcggtc ttaacctttt tcaccgagtt agcattggct gtctcaggag gctcacagct   1200
cctgctcctc ctccagggga gtgcgccctc ctcctctgtc ggtagctgtc aggtgcccct   1260
ttcctctgca gcagactgtc ctgggtcctt gcctggcctt ccccttacac gtgagcctgc   1320
agcttcattc acagcccctg tgtagaaga taggcactaa aagcagctga ctggcagccc   1380
tagaaacatg aagggtttca tttatagttt cagtcctttt ccttctttcg agccttaatt   1440
taaaaaaaaa aaaaaaaaa ctcgta                                          1466

<210> 582
<211> 1019
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (126)..(126)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (202)..(202)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (380)..(380)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (476)..(476)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (511)..(511)
<223> n equals a,t,g, or c

<400> 582
gtctcactgt gccacgcagg tgccctgcag ccacggagac gaatgtggac ggccagaagg     60
tgtaccgaga ctgtagctgt atccctcaga atctttcctc ggttttggc catgccactg    120
cagggnaaat gcacttcaac ttgtcagaga aagcccctcc ttctggtttt catattcgtt    180
gtgaattttc tttacattcc tncagcagca ttcctgcact aacggcaact ctacgatgtg    240
tccgtgaccc tcagagatcc tttgccctgg gaatccagtg gattgtagtt agaatactag    300
ggggcatccc ggggcccatc gccttcggct gggtgatcga caaggcctgt ctgctgtggc    360
```

388

```
agraccagtg tggccagcan ggctcctgct tggtgtacca gawtcggcca tgagccgcta    420
cataytcatc atggggctcc tgtacaagtg ctgggcgtcc tcttctttgc catagnctgc    480
ttcttawama agcccctgtc ggagtcttca natggcytgg raamttgtyt gcccagccag    540
tcctcagccc ctgacagtgc ccacagatag ccagctccag agcagcgtct gaccaccgcc    600
cgcgcccacc cggccacggc gggcactcag catttcctga tgacagaaca gtgccgttgg    660
gtgatgcaat cacacgggaa cttctatttg acctgcaacc ttctacttaa cctgtggttt    720
aaagtcggct gtgacctcct gtccccagag ctgtacggcc ctgcagtggg tgggaggaac    780
ttgcataaat atatatttat ggacacacag tttgcatcag aacgtgttta tagaatgtgt    840
tttatacccg atcgtgtgtg gtgtgcgtga ggacaaactc cgcaggggct gtgaatccca    900
ctgggagggc ggtggcctgc agcccgagga aggcttgtgt gtcctcagtt aaaactgtgc    960
atatcgaaat atattttgtt atttaagcct gaaaaaaaaa aaaaaaaaaa aaaaaaaaa    1019
```

<210> 583
<211> 973
<212> DNA
<213> Homo sapiens

<400> 583
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ggggactcag tcacacagaa aatagaagaa tgtgtgtaca gttggaaggt ctcagagaaa     60
aggagtctgt tggacagaat gaccagtctg tgactactgc catttttcat gaccatatat    120
caacccacat tacagatgta acttagtgag agaaaacatc tccctgtttt ccttcatata    180
ttatgaaata tttacttttt ctagtatttt gtctatctta cgtcaaagat ttaaatatct    240
ttgacctcct gtactaaata ccacgccaca tcagttttag ttgcctttct tttttcctta    300
ggctagtttt ttggtatacc atttctaaac caatggtagg aacattttaa ggcatctttt    360
gtctggaata wgttttagca tgtmcagcat gaaagtttta tatgtttatt aattttgtt    420
tataattgtt aatgaatatt aattttgtta atgaatatat attaaaccaa ttaataaaca    480
gtcacaaagc tgcaaaccgk tttaataatt attaaagttt taatttttta atggattttg    540
gtcatctaag ttccgaaatg aaatacacca aacttgttct tactttgcca aattgtccta    600
ctgtttctca gaatcaacat ttttagacat tatgtagaaa cactctttaa cctagttgts    660
tcaggcttag tagagaaagg aaaagaaaga aagttggagc tggaagagga aagttggtaa    720
atgtggtcag tagtgcattt tgtgtgacca ggcaagttct gcagaacctc ttctgaacac    780
cttcacctgt gtaaaatccc aggcattagt taatctccaa ccactatggc aggatatgca    840
tctgagagca aagaggcaaa tggcaagcag agatcacaaa ggtgcaagag ctagatgagt    900
gatagaacca gtgccaggac gatctaaatt cccttgcatt gtcaatacrc aaaaaaaaaa    960
aaaaaaaact cga                                                     973
```

<210> 584
<211> 1430
<212> DNA
<213> Homo sapiens

<400> 584
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ggcacgagca cttatgtgtt tggcattctc cgtcatcatt ctggccgggg cgggcagttc     60
taggagttgg aactcagtcc tggtggaaaa ggaagtcgtg gagggagggc taggccgtg    120
ggggaactgc tctgctgagc ctcttcctca cctgctgctt cctaggacta acctgaaagg    180
ctaaggtacc aggctgaagt cagtgctcag aaaaccaatc gtcattcttt ggggtttttt    240
ttcttgaaga gccactttct ctttaccttg ttctagcctg ttggaggtag ggtttctgca    300
attccaaagg ccgtacacag cctctcacca tcagaccact ttttaaggct cttcgttcat    360
acctagctcg aagattcact tcctcaggaa gccattttag ttacaaatct gggaaaactt    420
aaaatgcttt cattgtgcca tgttttctgt tgcagcttca gtaccgtacc tagtggtcag    480
gcatacttac aagtttcttt ttacagtaac cccttgtgga catctaataa atggtcatta    540
tttttagta ctagtttgtt ttcctgaaca ctgtaagatc tgtgactgac gtttgatacc    600
ttaaagcagt gccatataat aactacccac tatttgttct ttatttctgtcagataaaaa    660
tgttctatgt agtgtctaca gtcatttttt ttttaactag aatttagatt tggaagtagt    720
ttttctatta gttgatttgc atgaaataca aaattaggaa aaggcttatt ccacctcaac    780
ctagttgaac tattaatgat ttttttttt ttttgaggat ttgggctctt ctagataga    840
aaatcaccct gaacttctag ctttgcattg tgaagtgagc atcatgaaga tgagaaaatg    900
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```
ttgggagatc attttttgcaa aggggcataat agtcggcatt cagatatgag ttaactgcag      960
agggaaaatt gcaagctgtc atgttggcct tgttcctctc aaccttctgg taacctaaca     1020
agctcctaca ggttgtatgt gaaattgcaa gatgattata tagcctgtt gaatttacaa     1080
ccagatcttg ctttcaaacc attattagcc aagggtttga ttccacacct gtgttcatgg     1140
atttttttggt attagacatt gctgtaactc tgttttcact ttttcatctg ttatcttggc     1200
tcacttaagg gagaaggtat cagcagccta ggaccacttg gtttctgttt ttatgtttca     1260
tagttcatgg ctgataaaaa ttacctgtcc ttaggccgag tgcagtgcct cacacctgta     1320
atcccagcac tttgggaggc cgaggtgagt agatcacctg agatcaggag ttcgagacca     1380
gcctggacaa caagagcaaa actccatctc caaaaaaaaa aaaaaaaaa                  1430

<210> 585
<211> 1949
<212> DNA
<213> Homo sapiens

<400> 585
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ttctccacag gatctgcctc ggtctgtcag acattcctaa ggaaaattgt ataataacta     120
tttcgggaat gcagttatct catcatggtc agtctttggg gaagtgggct gagaaattac     180
atgtgttcta ttctctattt tcattcctat tgtgaccttc acaccgactc aaaaccttcc     240
ttttagatac ttctggatat aaaaatatat gttaattttg gggtttcaca ctcctgagtg     300
aaaggcagtg tcatcaagta cgtgaatgcc cagctcctaa atgtctttct cgttctcctc     360
ccacccagtc acgtcctcca ggcagtgacc ttccttttat tcacattccg cttacttcct     420
tgacccctca gcatttcaga cctgaaagga cactggtact gttgtccttg tcggggcctg     480
tggctttgcc tctcattccc tggtgaatgt caggaaatag agggctgaga ctaatttta     540
taggttctca attttttcttg cttggggaca agctgttgac ttagctctga ataggagtaa     600
taaggaggca gtgggccagg ctgcatgaca actggttttc aggcccatat aaaaaagtac     660
taactttatt atctcaagcc atgcctggcc tattgcaaag cccagtgtgg gtgtcttggg     720
gcttgtattt gagattggag cttctctgac ctccagtacc ctttcctcag gggccacagt     780
gtgtgtcaca tgaatggcaa ggtgaggtga ggcttggggg agctcctggt gctgtgtcac     840
accaccttac ctgtgtgcat tactctgtgc ttgttctttt gcatacatct gctgatttga     900
acctcacggc tctgacttaa ggagcaggta ggtagggcat gtggtccttc cctcccgttt     960
caaagacaag gaaagtgagt cacagagtag tgcactggct tacccaggac atacagtggc    1120
agagccaaga ctggagccta gctgcttgta ctaaccatgc cagtgccacc attaaccca    1080
agtcactagt ggtagctact tctgactatg actgtagtca ctgtctcctg gagaggagcc    1140
tggccaccag attgatagtc ccagctgaga ctctctcctg aactgataag ctgttttgca    1200
tgcttggaat gcctttcccc agtttgttca cctgataaac tcatccttat cctcaagatt    1260
cagcccagaa gacacccta aaggaagcct tggctgtcct tcccacccag tgttccctca    1320
ctgacttctg ttgctgctca cactgcattt tacctgcttg cctccttcca tgtgttccca    1380
gctagccagt aaattcttta aagacaagca ttgtacccett tgcctcagtg tgcccagaac    1440
caacctggca catgctctat tcatgttttc catgagtgtt tcatgttaga ggtgtatttt    1500
gtacacaggt tttatgctgg gggctcagag agaagtggac agcagattgt tggccctccc    1560
aggaagaaaa gtcccaacga gctggtggat gatctcttta aaggtgccaa agagcatgga    1620
gctgtagctg tggagcgagt gacaaagagc tggctgatga gagccagacc ctgaaggaag    1680
ccaacctgct caatgctgtc atcgtgcagc ggttaacata accgcccagc cagctgcctg    1740
gcctccctcc tgtgtttccc atggccagtg gccatgccccc atgggatcg cccctcctgc    1800
ccccttgtgc atacccagca gtccagtgca acgtctcctc catagctctg ggtcttaga    1860
tcttggttgg acgtttgttt tctccttagt tgcatttcct gggtttttgt gatgatcaat    1920
ggactttaat gaaaaaaaaa aaaaaaaa                                        1949

<210> 586
<211> 1499
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
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<400> 586

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agcttattgc aaagacaaat gtttgaagtg tttgttgaga tttcctgtg tncttcctga      60
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ctatcactgg agtcaggggt gaggggagga ccgcatgaca gttggttaat atacacttat     180
tttttggcaa aaacgttttc tctgggacca gaatgatctt gatactgaaa aaatttctag     240
tgctagatcc tctttctaag tgtgaaagga cttatctgga atgctccaga atgatcccaa     300
gtgttgagct gagagggacc tggcagcaga atctgattat tgaaaagtgg caattgttga     360
tttattgaag acagaataat aactcagcag aactgttatg ttgagctgaa cccgacctcc     420
ttcagccgaa tcatgcaaga atgcctgctg catggctgtt gcgctactt attaaggctt     480
ggtgttctgg gcacagtgca atgcatttct acatggttga tcctcacagc aaatgaacaa     540
cacaggctta aggaaacaag caactctcaa agtcctgcag tgagtagagc ttagctgttg     600
gtagtcaaca tgccacgcga ttcggragtt gagcctgtct ccagaggtta gagatgttca     660
gtttcctctt aaggttctta cgtagatttt tttcatgact ttatctacat cctccttaaa     720
tttacgtttt tagtccttac tggctcttga tatcaccagt tttgttgtta ttagtaattt     780
ctaactgccc taaatttgtc tgttttaaga ttcaagggat gatacctcag tctgttatct     840
ggaatatggt ttacaaatcc attttttctc ttcaaggct tgaaaacatt gacattgtct     900
cctcctaaca tttttatttg tcttgcagac tcctaattta tttaatttat cgttaggaag     960
acgacttttc tgtcttttga tgattttagc tgcccttctc tagaccttgc tgattccatt    1020
atctttacca agaattgaaa gtgaaagtgg catttgtcat agaatgccat ggtcttattc    1080
caaagtatct taggatggaa caatacaagg cataatatgg ggtcagtgag gtttgttaca    1140
cgagtgaatg accaacaaca ctactgtctg ttcaaaccca gtctgaaggg tgaatcagac    1200
cgaccattgg ccgtgagggt ctggactgct cagtattatc tcaaggatat caagggttat    1260
tggaaactgt gtgatcaaag gggctccatg acttatgca gggattcagt agggagccaa    1320
gaaggttgag aatagttcag agaccagagt ctaagaccaa tcaagaagaa tggatcaatt    1380
agagatatga attctggtgc ttatattttt gtggagctgg ttgtgagata aaaggtcaag    1440
cctaccagac tgaaaagtgt atgtgaaagc tctttaaaaa aaaaaaaaaa aaactcgag    499
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<210> 587
<211> 1558
<212> DNA
<213> Homo sapiens

<400> 587

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gcacatgcgg ccttgcagct ctccttacgc acatgcgggc cttgtagctc tccttaccca      60
catgcgggcc ttgccgctct ccttacccac atgtgggcct tgcagctctc cttacccaca     120
tgcggccttg cagctctcct tacccacatg ggccttgca gctctcctta cccacatgcg     180
ggccttgccg ctctccttac ccacatgggg ccttgccgct ctccttaccc acatggggt     240
cttgcagctg tccttacgca catgcgggcc ttgcagctct ccttacccac atggggcctt     300
gcagctctcc ttacccacat gcggccttgc agctctcctt acccacatgc gggccttgca     360
tgctgttggc tctggagcct ctcgtctcac aggtctctac aggtgcaggc cactcaccgt     420
ctggtggtca ggaccataaa ggacagggtt atgttaaagg ttttgcctca aaccagaagg     480
cgaggaccct ttctgtccag ttgccggaat gatgtcatga ggaactgtgt gcccaggcac     540
gctgtgctag ttacaacatg tgttttgtt tcattcccca cacactgtaa ggtgggcatc     600
actgggccca tcacacaggt gaaacagaag cccgggaatc actcgtcccc ttgcccagtc     660
```

```
atacaactag tagccaaggc agaatttgaa ctcatgttgc cctcagtccc aaaacctgtg   720
tacttaaccc ttgttctctc ctgctggtgt ctgtgtgatg tcccatgtct gtctgttcct   780
ctctaaaggg acagtgacac accaggagga tacccagatg ctgggggggcc ttgggacaga   840
gtctgggagg attgagtgaa ggagcaggtg agggtgagcc tggagagaga acgccctggt   900
ggagagttta tgtagaaagg ggattaggtc tccgggagga accggatcca tgtggtctgc   960
tgagatggct gagtctggca ttcagatgtg ccacccaaca gaagaggccc tggagggacg  1020
cccccttttgc tgggtggcag ccgtgggatt ccggggtctg ccttggaggt cctggagagg  1080
atgtcgtggc cctggcccta gactcaagct gcctgggtcc agttcagccc ggccactcct  1140
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tcacccaggc catgtgctta gcaatgtgcc tgacagccag tgccggtgtc agccattaca  1260
gggacacacg tgcctggagg ttgaggccac gttctgtcac ctaggcccgc tcgtggtcct  1320
gggctgggcc aaacccccct ttgaaaggat tcctttttgc ccctggcata ggctctcatt  1380
gtcctagtga acagctacat cttttttaaca agccagaaaa ggccagctgg cagtggctct  1440
gcctgaaatc ccaagactgg ctggccgaag caggaggatc acttgaggcc agcctggcca  1500
aagtaagcaa gactctgtct ctacaaaaaa ataacaaaaa aaaaaaaaa aactcgag     1558
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<210> 588
<211> 549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (474)..(474)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (484)..(484)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (528)..(528)
<223> n equals a,t,g, or c

<400> 588
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gaattcggca gagcagatgc ttcccactag agaagctaag aagctgtggc agccacascc    60
gggacagggc ctggcctcca gcccagggct ttccctgatg tccagcctca gctgcctctt   120
cctgcctcat cccacccgca agaggwgctg gggaccarag acagagacac aaactccatt   180
tgaatgtgaa ccttggcacc atggagatgc tcagggtgg cccagtctgc tctctcatta   240
gtatgaattt ccttgtgttt ctgtctctct cctcttccct ggtatcagct gctggkccca   300
ggtttccttc cagagaggag cggggggtgg gtggggtggt gctgattaaa tctgaggaca   360
tgacattgrg cgagagaagc aaggggagct gstgacctcc ctggatggat aaccatcagg   420
aggcggtarc agagtycama taccatcacc ttctcctgca gatgttggtt cagncacttt   480
cctnctacca cagatgggct atgtgtttca aagcagaaga gcagagangg cagagaaccc   540
cagctggtt                                                           549
```

<210> 589
<211> 1294
<212> DNA
<213> Homo sapiens

<400> 589
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ctgcagaatt cggcacgagg ttatttcacc tctcttggcc tcagtttctc tgtgaaatca    60
ggaattaaca tggtctctga dacccccttc tgatggtgaa tgtgtggttt ggtgattttg   120
tggccctgca tcatgacctt atttagttct cttttcaacag gggatgtttt actgccttgt   180
```

                                    392
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aaaatcctcg tgggactgcg tgtctttata ggagccaggg tgtaaatgaa cagaattcag    240
attggttcta atatattta cctctaaaag aaagggcatg gggaggccat gaccttaaag     300
caggttttt ctgttgtctg tgaagcctgt gatgattgag agtggctggg actggcggga     360
cgatgtttgg gtggaagagg gaggccatct gatgcgccc cgtcccgggg aggcacccag     420
cctgtaagga ggtgatgtct atctacactg agcgcaagga ccctgaaccg ggggaggctg    480
aggcggggcc tcttgattcc caccctgtcc cccagtggct aggctagtgt ggcccgggaa    540
atgacttcca tctctccctc caggcatatt taataagagg ccagtatttt cagattctgc    600
cgcttctgga cgaatgtctc agagagctgg gaggcgccct ggaggatgga acccttcctt    660
gagcgttgtt gaggtgtgtc gggggtgccg tggcacaggc cccctccct ggggggcatc      720
actgttccct tgctctgcat ccccgctgtt tcccctgccc ctgaacaggc gtggagatgt    780
gcacgggaca ctcggaggcc ggatgctcaa cagagtggag tgccgcgacg gtgtggccgc    840
agcctggctg tgccttcacg acgcagctgc aatcagagga gctgtgggac gctgtcccat    900
gtggacacag cccactcact gggtgctgct cctgtgctgg gcgctgcact tttattgtcg    960
ttaaaaattt atattaagat gcggccgggc atggtggctc atgcttgtaa tcccagcacc   1020
ttgggaggcc gagacgggcg gatcacgagg tcaggagatc gagaccatcc tggcttacat   1080
ggtgaaaccc cgtctctact aaaaatacaa aaaaattagc cgggtgtagt ggtgagtgcc   1140
tgtagtccca gctactcggg aggctgaggc aggagaatgg cgtgaacccg ggaggcggag   1200
cttgcagtga gccgagatcg tgccactgct ctccagcctg ggcgactgag cgaaactccg   1260
tctcaaaaaa aaaaaaaaaa aaaaaaact cgag                                1294
```

<210> 590
<211> 904
<212> DNA
<213> Homo sapiens

<400> 590
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ggcacgagat cgtcttgtga caagacttgc tgagaagcac cttaaaattc actgtgacc     60
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gactctctca tgggcaggac catcatggaa agttctgact acatcaagaa aggcgccaat    180
gtctcacctg tgcttggggt caggcagcag gctgtgatgc cggtgcctct ctggttggta    240
ctgtggttct gcttcctgtt atatgtagcc tcacgaagga cctttggatt agccaattac    300
atgcccctac cctgagcttc ttccccagct ctttgacttc ctggacattg gtgaatatcc    360
tgaataagca aaagggataa aattcataga aatatggtgg caaaaatata caacttcagc    420
ccagttcttt gggtccatgt tggtaaggag tccagttggc aagacaagct gccaaggaa     480
gtgcctcaga agtctgggtc aaagaggagg gccagatctg ttctgtgaga ccctatgtga    540
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cctggccaac atggcaaaac cctgtccatg gtggtgtgcg aggctgaggc aagaaaatcg    780
cttgaacccg agaggcagag gttgcagtga cctgagattg cgccactgca ctccaacctg    840
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aaaa                                                                 904
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<210> 591
<211> 1374
<212> DNA
<213> Homo sapiens

<400> 591
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ttcagcctgg ccagccctct ggaccccgag gttggaccct actgtgacac acctaccatg    180
cggacactct tcaacctcct ctggcttgcc ctggcctgca gccctgttca cactaccctg    240
tcaaagtcag atgccaaaaa agccgcctca aagacgctgc tggagagag tcagttttca     300
gataagccgg tgcaagaccg gggtttggtg gtgacggacc tcaaagctga gagtgtggtt    360
cttgagcatc gcagctactg ctcggcaaag gcccgggaca gacactttgc tggggatgta   420
ctgggctatg tcactccatg gaacagccat ggctacgatg tcaccaaggt ctttgggagc   480
```

```
aagttcacac agatctcacc cgtctggctg cagctgaaga gacgtggccg tgagatgttt      540
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aagggcctgc acatagtgcc tcggctcctg tttgaggact ggacttacga tgatttccgg      660
aacgtcttag acagtgagga tgagatagag gagctgagca agaccgtggt ccaggtggca      720
aagaaccagc atttcgatgg cttcgtggtg gaggtctgga accagctgct aagccagaag      780
cgcgtgaccg accagctggg catgttcacg cacaaggagt ttgagcagct ggccccgtg       840
ctggatggtt tcagcctcat gacctacgac tactctacag cgcatcagcc tggccctaat      900
gcacccctgt cctgggttcg agcctgcgtc caggtcctgg acccgaagtc caagtggcga      960
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cgtgagcctg ttgtcggggc caggtacatc cagacactga aggaccacag gccccggatg     1080
gtgtgggaca gccaggcctc agagcacttc ttcagtaca agaagagccg cagtgggagg      1140
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ctgggcgttg gggtctctat ctgggagctg ggccagggcc tggactactt ctacgacctg     1260
ctctaggtgg gcattgcggc ctccgcggtg gacgtgttct tttctaagcc atggagtgag     1302
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<210> 592
<211> 652
<212> DNA
<213> Homo sapiens


<400> 592
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taamatacaa aacttccccc agtcactggc cgccaggctg agttggggga tgtgttacat      180
ccctgggtcc actggggggc agtgttggcc atggtgttgg tgctggctct gccgagaggc      240
gttggagtgg ctgtgtgggg cggtgagcgc cggcccagcc tgatggaacc cactgtacca       300
ggcccaggcc tcagcctctg agaaggactt ccctgtgtca ctcactcata catgtcctca      360
ggacgtgaag acatttcagc agaccaaagt ttccttcgaa tttccttcga atcgtccaga      420
tacttggaga catctcctcc tcacctgtgg ggtgctgggg cagtcctagg cgtggggggca      480
gatgggtgga cagctgctgc tgccctgctg ggggtgggca gcccttggag cacacagtgg      540
tgaagacatt cctgaatatg tctcaggctg tagaaatctt attttgtgga aagattttag      600
agaatcatca aaataaactt ttaccaaata aaaaaaaaa aaaaaaactc ga             652


<210> 593
<211> 3059
<212> DNA
<213> Homo sapiens


<400> 593
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gggccagaca agcctgtcca ggccttggtg ggggaggacg cagcattctc ctgtttcctg      180
tctcctaaga ccaatgcaga ggccatggaa gtgcggttct tcaggggcca gttctctagc      240
gtggtccacc tctacaggga cgggaaggac cagccattta tgcagatgcc acagtatcaa      300
ggcaggacaa aactggtgaa ggattctatt gcggaggggc gcatctctct gaggctggaa      360
aacattactg tgttggatgc tggcctctat gggtgcagga ttagttccca gtcttacta      420
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gcgggatatg ttgatagaga catccagcta ctctgtcagt cctcgggctg gttcccccgg      540
cccacagcga agtggaaagg tccacaagga caggatttgt ccacagactc caggacaaac      600
agagacatgc atggcctgtt tgatgtggag atctctctga ccgtccaaga gaacgccggg      660
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ataggagact ggagaagaaa gcacggacag gcagtaaaa gaaaatattc ctcttcacac      780
atttatgact cctttccaag tctctcgttt atggattttt atatcctgag gccgtgggt      840
ccctgcagag ccaagcttgt gatgggaact ctgaaattgc agattctggg ggaggtgcat      900
tttgtagaga agccccatag ccttcttcag atctctggag ggtccacaac actcaaaaag      960
ggtcccaatc cttggtcttt cccttctccc tgcgccctgt ttcccacgtg agcacggaac     1020
```

```
tgcctgctct ctctgcttgc tttcagaatt gagagacgcc cggaaacacg caggtaccaa    1080
cgcctgagag ggtaacagtg ggcatggagt aggaagatga ccagtgacag atatggagcc    1140
catccagctt gtagacagca aatctgtgat gcccgaatcc accccagggt gcagctgcct    1200
ctaaatacac ttcttggccc aggacttgga gggaaaagcg tagggactgg gtcagctagg    1260
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cctctctccc ccaccgcacc ccagtggagg tgactctgga tcagagacg gctcacccga     1680
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tgttgagacc ctatatccag catgcgatgt atgacgagga aaaggggact cccatattca    2160
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ttgtgaaaac tccatccagc taagcgatct gaacaagtc acaacctccc aggctcctca     2520
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caaagaataa agaggaggta ggattttca ctgattctat aagcccagca ttacctgata     2820
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ttaacacaga cacaaaaatt ctaaataaaa ttttaacaaa ttaaactaaa caatatattt    2940
aaagatgata tataactact cagtgtggtt tgtcccacaa atgcagagtt ggtttaatat    3000
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```

<210> 594
<211> 1963
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)..(5)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1116)..(1116)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1253)..(1253)
<223> n equals a,t,g, or c

<400> 594
ggtanctgca gtacggtccg attcccgggt cgacccacgc gtccggagaa atgcaaatta   60

395

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aaacagtaaa gtgtcatttt cacttcctgg attggcaaag ggttttatgt attttactga    120
cagtgctcaa cattagcagt aaacaacaaa tggtgagtaa atatgagctt cggaacctca    180
gggaaatgat ctccttattt caacctgcag attccttcct acaaccagg tagagcagag     240
taccaggacg ggccattgag caccctggtg ttgagatcaa gtggcctcta gtcagagttg    300
ggtcagggcc actgtgagtg ggctgccccc aacatgagtc agctgtctag gactagttta    360
tctctgcttc tcactttact ggtattatgg ggcagctcct gctgtcttcc aatttggtgt    420
cttccaaatc ggcaccgtct tttaaagttg agtttcttgt tattctcacc tgatatacct    480
tatttatccc acacccaccc caataacata tcgtgctcag tgttatcttt gagacaacac    540
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attcttcagc cgtgcatcag taaatggggg ctaggttaaa cgtggtgac aaacaacctc     660
caaatttcag tggctcaaaa atcttcttcc tcatttatwt acatttcatc atgggtcagg    720
tgagaggtag ctctgtgctg tgtcatccta acacaggaat ccagacggaa ggagggacaa    780
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aaagtcatgt ggccatgtga aaatgtaagt aggcgggatg gaacagtcag aatgcattca    960
taaaatatga actgaaaata tctggagaac akcacctatg actaccacga atgccaacat   1020
gcatccctaa caacccagtg ctgtcaccct ccaaactttt tatgtcttgc aaagtattag   1080
aacttcttat ctgaagccat accactcaga gggaangcaa aatacatatt gacatctcct   1140
ttaggatgtc cttagagaat tcaaggaaaa gaagttaaat aatttttaaag tgcttttggg   1200
tacagctatt tagcactaga gggtaagatt agacatagat tgtaaagata atnatagggt   1260
tagggatagg attaggatct gggtcagagt caggsccaga agtatggtta gaggtggggt   1320
catggtcagg gtsgagatca aagtcagggt caaagtaagg gtcagaatta gggacccagg   1380
atagggatca ggatttaggt tcagtgtcaa agtcttggga caaggttagg gttagaatta   1440
gaaccagagc tttgttctcc tcaggaccca ccgagggtg ggtcaccatg gctttggagc    1500
gcctggtagt gtggtgtgtc cacagkgaag accagagttt cattgtcctt aagactgacy   1560
tggggagatg tggctgtags ccattgagga aggtgaggca acagcttcct gtctgctycc   1620
ccgtgtgctg aggagggagt tctgccatgg gctttacttt cacatgttat attccacaag   1680
tcttgttttta caaaagcatc ccttccttga ggcttcggct gctcatcgct gctcatcatm   1740
atagcgtgcc ataacatata gtaagatttg ggtttgtttc tggggagata tcttggtata   1800
gagaaaggag aaatgcttag agccaccatc aggacagttg ggatgaaagt tgggtatagg    1860
cagaggctgg aggaaacatg tgcatcccct gtaaacactt ttattcatgt tttaattact   1920
cattttttctt acagtgttaa attagtaaag atagtattga aaa                     1963
```

<210> 595
<211> 963
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)..(2)
<223> n equals a,t,g, or c

<400> 595
```
tncagaggcc ctgcggagtt gttcagaacc ccaactctct ctggctggct accccctgaa     60
ctactgggtc tctggaccca ttgtgcccag ccacccccaa aagccctcag gcgagagctg    120
cctgaggagg caccgctgag gaggaaagga gaaagattga agttccaagt gagattgaga    180
gatctcccta gaggcagctg aagaggagaa gtcccgcatc agcctcatcc caccagaaga    240
acggtggtaa gcggccaggc tccgtggrag ccagggccca magcccttgg ccagktkgtg    300
gaaacagctg ctgggatggg tatgcccctt gtcactgtca cagctgccac cttccctact    360
ctctcatgtc ctcctagggc ctggcctgag gtggatgcctt tggtgctgcc cccagagctc    420
gtggtgcctg aactccctga ggtgcccatg gagatgcctt tggtgctgcc cccagagctc    480
gagctgctct cactggaagc agtgcacagg taccaggrag gtggcacctt gatggggtgg    540
acccgggctg aagcctctgc taatggttct tgatccctat agggcagtgg cactggagyt    600
gcaggctaac agggagcccg acttcagcag cctggtgtca mctctcagcc cccgcaggat    660
ggctgcccgg gtcttctamc tgctcctggg tgartgtatg catgtgtgtg tgtgtatgtk    720
gggcagggac acagagacca gaggcccgta cagggactcc cccgacctgc cctctcctcg    780
```

396

```
cctcttgacc agtgctctca gcgcaacaga ttcttcacgt gaaacaagaa agccatatg       840
gtcgcctcct gatccagccg gggcccagat tccactgagg ttagagtcca tttacaaagc       900
tgccaggaaa ccggccactt ctagtaaacc acgtcgtgcc tcactgaaaa aaaaaaaaaa       960
agg                                                                     963
```

<210> 596
<211> 675
<212> DNA
<213> Homo sapiens

<400> 596
```
ggcacgagct gctcttcttc ttcaacatgc tcttctgggt gatttccatg gtgatggtgg        60
ctgtgggtgt ctacgctcgg ctaatgaagc atgcagttct ccctctgcct caccgctgtg       120
ttcctgctgc agctggccgc tgggatcctg ggcttcgtct tctcagacaa ggtcgaggg        180
aaagtgagtg agatcatcaa caatgccatt gtgcactacc gagatgactt ggatctgcag       240
aacctcattg attttggcca gaaaaaggta tgggtcagcc agtggtctgg gggactgtgg       300
gtaaaagtga atgtcatccc aagagatgcc tcaccctcta tgcctgtggg gctcttcatt       360
acctgccagg taatggcttc tgggaagggg tttggcaaaa aaagcacacg tagcagagtg       420
ctttaaatgt acttttaaag acacagaaca gtatatatag taatctactg tgttataaat       480
ggttacttac aggggtgag gaactgggca gattcttgaa tattacctct tcaaaagtga       540
cattttaggc tggtccaaag ggagtgagtt atctcatttg attgttaca gtcagctaca       600
gatccaactc cttgttctac tctttccccc cttctcagtg ctgcacttga ctagactaaa       660
aaaaaaaaaa aaaaa                                                        675
```

<210> 597
<211> 1134
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1134)..(1134)
<223> n equals a,t,g, or c

<400> 597
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ncgccccgga ctcttctcag ttgagagtgc ggttcctggg caggtttcca caccagttcc        60
tttccgcgtc cttcggccct ggctctggct gcctggcgga ggggggtag catttgtcat       120
ttgcacactg ctggctttat cttTgggggct gcaccccgag gcaacaaatg caggatgctc       180
tgtcacccac atgtccacca ccatctggtt tgccttttgg ctactttgac tttctcctta       240
aatgcttcct gtgctgagca aacattccac agccagcaga gcaatggaga gttcatggcc       300
actcttccca gtatcagcaa gcaatttggg gtgatcgttt ggaagcctca gaggaaagat       360
gtcatcaggc ttcctgtggc tttgtccttc agcagtgggg ctcggcttgc tttcacctgc       420
cttaggaaga tttctggctt ccgagctctg atatggggag aagataaggg ctgggatctt       480
tgagtctgcc cctagctggg tatgtgcgtc cggtgtcgg gccttggagt ttttggtaat       540
gactcacttg tgctctttct gggatctgtc tccctcccac atgacccgt ggggtccctg       600
aatgactgtt ttagagtacc catgtgggtt ccctgagtca cagcagggga tgtttaataa       660
ggaggttagc actgagcttg gggacgtgct gtcacaccag caggacgctg caggaaggag       720
caggctactt cctttcttga cgtgcaaata actcgtatag gctaatcaac aggcttataa       780
gttaaaaggg ctaccgctcg gccccttggg gattccatcc cctcctctgt aacttggaga       840
tgtttgtttc tgctgcagac tcagagggtt gcgatgaaga gtggtgggac tgagttgaga       900
agcttatccc ttcgctgggt gggaggtttc taattgcccc gttctttggg ggatccttaa       960
gtccagcttc caggtggggg cagcgatagg accaagttct cctagtagtc tctgggaagc      1020
```

```
cacttgaggg  aagctgccgg  tcatcccatg  cacccattgg  tcttctccag  caggccctgt  1080
aggtcgtcca  tgttccatgc  cttctgggtt  cttgggggag  aaggaagctg  ttgn        1134
```

```
<210> 598
<211> 1583
<212> DNA
<213> Homo sapiens
```

```
<400> 598
ggcacgaggg  acaacgacta  tctgctacat  ggtcatagac  ctcccatgtt  ctcctttcgg    60
gcttgcttca  agagcatctt  ccgcattcat  acagaaactg  gcaacatctg  gacccatctg   120
cttggtttcg  tgctgtttct  cttttttggga atcttgacca  tgctcagacc  aaatatgtac   180
ttcatggccc  ctctacagga  gaaggtggtt  tttgggatgt  tctttttggg  tgcagtgctc   240
tgcctcagct  tctcctggct  ctttcacacc  gtctattgtc  attcagagaa  agtctctcgg   300
acttttttcca  aactggacta  ttcagggatt  gctcttctaa  ttatggggag  ctttgtcccc   360
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caccggcaga  caagagcagg  cgtgttcctg  ggacttggct  tgagtggcgt  cgtgcccacc   540
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ttcttcctca  tggctgtgat  gtacatcact  ggagctggcc  tttatgctgc  tcgaattcct   660
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tggaggagga  acttcccaag  tgctttttaaa aataacttct  ttgctgaagt  gagaggaaga   900
gtctgagttg  tctgtttcta  gaagaaacct  cttagagaat  tcagtaccaa  ccaagcttca   960
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acagtacttt  gaaactcatg  ttgagatttt  accctctcct  ccaaccattt  tgggaaaatt  1140
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cccccatcct  taactttgta  tcctggctta  taacaggcca  tccatttttg  tagcacactt  1260
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aggaagaata  aagccaccaa  cttttaccta  gcccggctaa  tcatggaagt  gtgtccaggc  1380
ttcaagtaac  ttgagtttta  attttttttt  ttttcttggc  agagtaatgt  aaaatttaaa  1440
tggggaaaga  tatttaatat  ttaatactaa  gctttaaaaa  gaaacctgct  atcattgcta  1500
tgtatcttga  tgcaaagact  atgatgttaa  taaaagaaag  tacagaagac  acttggcatt  1560
caaaaaaaaa  aaaaaaaaaa  aaa                                             1583
```

```
<210> 599
<211> 1991
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (300)..(300)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc_feature
<222> (353)..(353)
<223> n equals a,t,g, or c
```

```
<400> 599
gcgacgctcg  gcccgaagat  ggcggccgaa  tggggcggag  gagtgggtta  ctcgggctca    60
ggcccggccg  gagccggtgg  cgctggagcg  ggtctgtgtg  ggtccgaagc  gttttactcc   120
tgttgggcgg  gctccgggcc  agcgccacat  ctactcccgt  ctccttgggc  agttcccctc   180
cctgccggca  ccacgtcccc  tctgacactg  aggtcataaa  taaagttcat  cttaaggcaa   240
```

```
atcatgtggt caagagagat gttgatgagc atttaagaat caagactgtc tatgataaan    300
tgktgaasag ttgctccctg agaaaaagaa tcttgtaaag aacaagcttc tcncacawgc    360
gatttcttat ttagagaaga cttttcaggt ccgtcgacct gcgggcacta tcttacttag    420
cagacaatgt gcaacaaacc aatacctccg gaaggaaaac gatcctcaca ggtactgcac    480
cggggagtgt gccgcacaca caaagtgcgg ccccgttatt gttcctgagg aacatctcca    540
gcaatgccgg gtctaccgtg ggggtaagtg gcctcatgga gcagtgggtg tgccagacca    600
agaaggcatc tcagatgcag actttgttct ttacgttggt gctctggcca ccgagagatg    660
cagccatgaa aacatcatct cttatgcagc ctattgtcag caggaagcaa acatggacag    720
gccaatagca ggatatgcta acctgtgtcc aaatatgatc tctacccagc ctcaggagtt    780
tgttgggatg ctgtccacag tgaaacatga ggttattcat gccctgggtt tctctgctgg    480
gctgtttgca ttctaccatg ataaagatgg aaatcctctc acttcaagat ttgcagatgg    900
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399

<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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401

<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
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403

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406

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ggagcgctac ctggatatca atgagtgtat tcttgaaaac tatcccgagt gctccaaccc      780
caggttattt tacatcattc cgyacttkkg tggacagcat cccagatgca gggagcctgg      840
tgaatgggcc cttgagagag caaagctgaa cgtgaatgaa aacttcctgc tcgtggggat      900
tcttgaagag ttggaagatg tgctgctgtt actggaaaga ttttttacctc attacttcaa    960
gggsgtgctc agtactacaa agacccagag cacaggaagc ttggaaacat gactgtgacg      1020
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<210> 616
<211> 1317
<212> DNA
<213> Homo sapiens

<400> 616
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aaggcggtca acatccgggg caaactggtg tcgctggaga agtaccgcgg atcggtgtcc      180
ctggtggtga atgtggccag cgagtgcggc ttcacagacc agcactaccg agccctgcag      240
cagctgcagc gagacctggg cccccaccac ttcaacgtgc tcgccttccc ctgcaaccag      300
tttggccaac aggagcctga cagcaacaag gagattgaga gctttgcccg ccgcacctac      360
agtgtctcat tccccatgtt tagcaagatt gcagtcaccg gtstggtgc ccatcctgcc      420
ttcaagtacc tggcccagac ttctgggaag gagcccacct ggaacttctg gaagtaccta      480
gtagccccag atggaaaggt ggtaggggct tgggacccaa ctgtgtcagt ggaggaggtc      540
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ttccagccga tgataatcca ggccaaaggt ttagttgttg ttatttcctc tgtattattt      1140
tcttcattac aaaagaaatg caagttcatt gtaacaatcc aaacaatacc tcacgatata      1200
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa          1317

<210> 617
<211> 1138
<212> DNA
<213> Homo sapiens

<400> 617
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acagagtgag actctttctc ccaaaaaaaa aaaaaaaaa aaagtcaaat gcagctggga       180
atgtggttcg tgcctttttg tatattaacc atttgaaact tggttgtaag gtggggttgg      240
caatgtcagg cctggctgca gcagctcatg tctttagagt gtgcctcttc cctctctcgt      300
ggggctcgag caagactacc ttcatacatg ggctctccag ttacatagca actccagtgt      360
taaattccat cttttcttcc tggaaaagcc gtagaagga cacctggaca tgcctgctgc       420
acaggttgtc tgccttcccc atcagccgca gaaggaggaa ctttgctctc ttctctcaca     480
gctgtgtgtg cataagaagt agttcggatg atgtgggtcc caccatgtat tccttctctg      540
ttccatgtag agtaaaataa atgggagttc tgtttaatgc atcacctcgg ttcatattgc      600
atttgccaag aaagtgcaat tttattgaac attaggattg aattcttaac tgagtaatca      660
atttcagtag taagttaaaa tgccttctat taatggacaa ctgcaaccgt taatcagagt      720
tacagtagat taacagttgt cagcatttat gctaatagca ctaataaacc gtgggctcat      780
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409

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gatttgcact ttataattcc atatttctca aaacagttgg taatactttt tgcttgaagg    840
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ttcacggtga tgacacaata tcaccttctg cttttgcaca cttggctttg tgtcaaaata    960
gatggaaagg gttcatttgt tctggtgctc tactgtttaa tttgatctgg tgtgtgacta   1020
aagcaagaca aatagtattt ttaatgaaac catttaataa cctctggtag cttagagtcg   1080
aaggcattgg aaaaatgcaa ttaaaggatg cctagatgta aacaaaaaaa aaaaaaaa     1138
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<210> 618
<211> 1841
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 618
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agggcctggc ggggggcgctg gcttccgtgc tggctggcca ggggtccagc gtgcacagct    180
gcgactcggc gccggccggg gagccgccgg cgcccgtgcg gctgcggaag aacgtgtgct    240
acgtggtgct ggccgtgttc ctcagcgagc aggatgaggt gctactgatc caggaggcca    300
agagggagtg ccggggggtcg tggtacctgc ctgcggggag aatggagcca ggggagacca    360
tcgtggaggc gctgcagcgg gaggtgaagg aggaggcggg gctgcactgt gagcccgaga    420
cactgctgtc cgtggaggag cggggcccct cctgggtccg cttcgtgttc tcgctcgcc     480
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ggtacccacg gacctccctg cccactccgc tgcgagccca tgacatcctg cacctggttg    600
aactagccgc ccagtatcgc cagcaagcca ggcaccctct cattctgccc caagagctac    660
cctgtgatct ggtctgccag cggctcgtgg ctacctttac cagcgcccag acagtgtggg    720
tgttagtggg cacagtgggg atgcctcact tgcctgtcac tgcctgtggc ctcgaccctg    780
tggagcagag gggtggcatg aagatggccg tcctgcggct gctgcaggag tgtctgaccc    840
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agagaggtgg aggaggtgac agggagctag gcagccgtgc tccctccagt gcggacttgt   1140
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cggctctcct ggtccccagg agagatgctt tgaggagcat tcctctagat tgcacaaggg   1260
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ggaggggcac tggggaaggt cccccgaggg aggagcacgt tgctgagtaa agaggtgtta   1500
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aggagctgct gctcccctcg tgttacccac aggcacccat gcctttccca gtgcactgac   1620
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cccgggatgt gactctgagg ggacccatcc ctaatgaaac acagctctga gccctccaag   1740
ggttgggcag tgggcggccc cagaggaact tcaagtggga caggagctgc aggtgctgcc   1800
tctgctctct ccttgagcct ccctggcgca gaccactccc c                       1841
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<210> 619
<211> 1133
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1061)..(1061)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1078)..(1078)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1102)..(1102)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1107)..(1107)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1111)..(1111)
<223> n equals a,t,g, or c

<400> 619
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cagggagttg cccgcagccg caccgcacgt cttcagcccg accgttgtcc tgacctctct      180
gtcccgtccc ctgcccagtc tcaccatggc cttctggaca cagctgatgc tgctgctctg      240
gaagaatttc atgtatcgcc ggagacagcc ggtccagctc ctggtcgaat tgctgtggcc      300
tctcttcctc ttcttcatcc tggtggctgt tcgccactcc cacccgcccc tggagcacca      360
tgaatgccac ttcccaaaca agccactgcc atcggcgggc accgtgccct ggctccaggg      420
tctcatctgt aatgtgaaca cacctgctt tccgcagctg acaccgggcg aggagcccgg       480
gcgcctgagc aacttcaacg actccctggt ctccggctg ctagccgatg cccgcactgt       540
gctgggaggg gccagtgccc acaggacgct ggctggccta gggaagctga tcgccacgct      600
gagggctgca cgcagcacgg cccagcctca accaaccaag cagtctccac tggaaccacc      660
catgctggat gtcgcggagc tgctgacgtc actgctgcgc acggaatccc tggggttggc      720
actgggccaa gcccaggagc ccttgcacag cttgttggag gccgctgagg acctggccca      780
ggagctcctg gcgctgcgca gcctggtgga gcttcgggca ctgctgcaga gaccccgagg      840
gaccagcggc cccctggagt tgctgtcaga ggccctctgc agtgtcaggg gacctagcag      900
cacagtgggc ccctccctca actggtacga ggctagtgac ctgatggagc tggtggggca      960
rgarccagaa tccgcctgca gacagcagct gagcccgctg ctcggagctk attggagcct     1020
ggacagcacc cggtgtccgc tggtctggaa cgctgaagct ntatcctcgg aagtactntt     1080
gacagatcac tttaccgaag tnatggncag ngaacgactt cagagttacc tgt            1133
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<210> 620
<211> 753
<212> DNA
<213> Homo sapiens

<400> 620
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cccacgcgtc cgactgctta tatttggcat tgtctttttcc ctggcactgc cactgtcacc     60
accatccccc ttctggatcc ctactttacc ccttcatgct gctctggtgg cagtgcctct      120
gctgccatgc tgtacttgag cctgctgcta cagccatgcc tgaagatgca gccccttcct      180
ctcttcctgt cccaccaaat atgaccagct ctaggttcca ttacttctgg actttgctcc      240
aaataaaact tacacaattt tattccaaac ccaggtctct ttctgcaaca cccgagaaaa      300
atattgggct gcaggagcca gagaggagag agagatttac tggtgagagt tgtaggtggg      360
aattgaaaag ccaagtcatg tctttgcccc accagaaact cactaggatg tacacaatgc      420
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411

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cactgtgatg gttttaaaat atgtaactaa cctgcacgtt gtgcacatgt accctaaaac    480
ttcaagtata tataaaaaaa gaaagaactg ctgatacaca tatcatgaaa aaagaccaaa    540
taaaataaaa aaataaaaat aaataaataa aataaaatat gtccacaaat gctttgatgt    600
tcctttgttt cttgatctgt atgctagcaa cacaggttca ttccgtttgt gaaaattcat    660
tgagctgtgc tcttatgagc tgtgtacttc tctacatgta tgttaaatgt ggacaagaac    720
ttcacataaa aatcatttta aaaaaaaaaa aaa                                753


<210> 621
<211> 1604
<212> DNA
<213> Homo sapiens

<400> 621
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atcagatatg caaagaagct cataaaatt tttttaaaa atgcaaaaca agaatctcca    180
attatgggag caaaatcttc agcttctggg ttcctgtctc actgaggaaa tggatttgaa    240
atggcaagga ggaaatgagg aggcaaactt tcatgtctat tttagttttc caatgcagtc    300
ctatttcctt tggactttgt ataaacaagg aaaggacagt tgttagttca gttatacag    360
ataacctgtg tctttaaagt aaatgtatct taaataagta ggactcccat aaatgactac    420
acttttttcaa aatatgactc cccagcttat aacaagaata atagcaaaca tcactttatt    480
aagcaattac tatgtaaaag acacttagtg cttagcacac actggaaata ttgttgactg    540
gctatatttt ccccagaaat cccatttctg aaagcctatt acaaagaaat aaaatcatca    600
gtataacaaa ggagtgtgtg tgtgtgtggg tgtgagtgtg tgtgggtgtg agtgtgtggg    660
gggtgtgagt gtgtgtgggt gtgagagtgt gtgtgtgagt gtgagtgtgt gtgtgtgtaa    720
gtgcacacac atgttgtagt attgttcata gtggcaaaaa ctagaaacaaagtgaatatt    780
gataacatgg gcacagatga caaattatat ctccaaatta tgaaacagaa tccagccatt    840
aaaatcagag ctttgccacg tgactaggat gaagttacaa aaagtattgt tgagtgagaa    900
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gagatggagt ctcgctctgt cactcaggct ggagtgcagt ggcacaatct cagctcactg   1020
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taccgtcacc tgccaccacg ccccagctaa ttttgtatt tttagtagag atgggctttc   1140
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cccaaagtgc tgggattaca gtcgtgagcc actgcacctg ccgatttct tttttaaaat   1260
gatcaaaaaa ccatttatat gtgggaatat agctatatac ttttattatt gaattaccat   1320
ggaaaaaaac atggaagagg gaggccaagg caggagaatc acttgaggcc caggagtttg   1380
agaccagcct gggcaacaaa gcgagaccct catctctact aaaaatacaa aaattacctg   1440
ggcctggtga cacatgcctg taatcccagc tactcagaag actaaggcaa gtgaatcgct   1500
tgaacccgag acgtggaggt tgcagtgaag tgagccaaga tcgcgccgtt gcactccagc   1560
ctggtgacag agtgagagtc tttctcaaaa aaaaaaaaaaaaa                      1604


<210> 622
<211> 1021
<212> DNA
<213> Homo sapiens

<400> 622
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ctggaagact tcgcgggcca caggcacagc cttcctgctg ctggcggcgc tgctggggct    180
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cagcctgcag cgctgcctcg cagtcacccg cccttcctgg cgcctcggct cgcagcccg    480
gcctggcccg ccgctgctgc tggcggtctg gctggccgcc ctgttgctcg ccgtcccggc    540
cgccgtctac cgccacctgt ggagggaccg cgtatgccag ctgtgccacc cgtcgccggt    600
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ccacgccgcc gcccacctga gcctggagac tctgaccgct ttcgtgcttc ctttcgggct      660
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ggggccttgg cgaagctggg cggagccggc caggcggcgc gagcgggaac tacggccttg      900
gccttcttca gttctagcgt caacccggtg ctctacgtct tcaccgctgg agatctgctg      960
ccccgggcag gtccccgttt cctcacgcgg ctcttcgaag gctctgggga ggcccgaggg     1020
g                                                                     1021
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<210> 623
<211> 985
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 623
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aatcctgctg tcttactgct ctatcctgtg taactacaag gccatcgaaa tgccctcaca      120
ccagacctac ggaggggagct ggaaattcct gacgttcatt gatctggtta tccaggctgt      180
ctttttttggc atctgtgtgc tgactgatct ttccagtctt ctgactcgag gaagtgggaa      240
ccaggagcaa gagaggcagc tcaagaagct catctctctc cgggactgga tgttagctgt      300
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cagagagatg atatacccga agctgctgga taattttatc ccagggtggc tgaatcacgg      420
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cgtccttgta ttctgtttgt ggagagtacc ttctctgcag tggacagtga tctgatattt      960
caaatcttat ccagcctcca aaagt                                            985
```

<210> 624
<211> 1445
<212> DNA
<213> Homo sapiens

<400> 624
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ggaaggctgc aggaccagga ccgaaaaagg actaggaggc tgggatcagc aacaactggg       60
gaaggccaag gaagactgac ctgaggggaa aggagaaact ggggaggtga ggtctactac      120
tcaacaggat attcttcaag gaaatgaac cccacactag gcctggccat ttttctggct       180
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atggacttag gctttaagct gctcaagaag ctggcctttt acaaccctgg cagaacatc      360
ttcctatccc ccttgagcat ctctacagct ttctccatgc tgtgcctggg tgcccaggac      420
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catgagggct tccattacat catccacgag ctgacccaga gacccagga cctcaaactg       540
agcattggga acacgctgtt cattgaccag aggctgcagc cacagcgtaa gttttttggaa      600
gatgccaaga actttttacag tgccgaaacc atccttacca actttcagaa tttggaaatg      660
gctcagaagc agatcaatga ctttatcagt caaaaaaccc atgggaaaat taacaacctg      720
atcgagaata tagaccccgg cactgtgatg cttcttgcaa attatatttt ctttcgagcc      780
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413

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aggtggaaac atgagtttga tccaaatgta actaaagagg aagatttctt tctggagaaa    840
aacagttcag tcaaggtgcc catgatgttc cgtagtggca tataccaagt tggctatgac    900
gataagctct cttgcaccat cctggaaata ccctaccaga aaaatatcac agccatcttc    960
atccttcctg atgagggcaa gctgaagcac ttggagaagg gattgcaggt ggacactttc   1020
tccagatgga aaacattact gtcacgcagg gtcgtagacg tgtctgtacc cagactccac   1080
atgacgggca ccttcgacct gaagaagact ctctcctaca taggtgtctc caaaatcttt   1140
gaggaacatg gtgatctcac caagatcgcc cctcatcgca gctgaaagt gggcgaggct    1200
gtgcacaagg ctgagctgaa gatggatgag aggggtacgg aaggggccgc tggcaccgga   1260
gcacagactc tgcccatgga gacaccactc gtcgtcaaga tagacaaacc ctatctgctg   1320
ctgatttaca gcgagaaaat accttccgtg ctcttcctgg aaagattgt taaccctatt    1380
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gccgc                                                               1445


<210> 625
<211> 1699
<212> DNA
<213> Homo sapiens

<400> 625
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aggccatgat ctggactgca ggctggctgc tgctgctgct gcttcgcgga ggagcgcagg    120
ccctggagtg ctacagctgc gtgcagaaag cagatgacgg atgctccccg aacaagatga    180
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<210> 626
<211> 1529
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1505)..(1505)
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414

<223> n equals a,t,g, or c

<400> 626

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agctgagaac atggacgtta atatcgcccc actccgcgcc tgggacgatt tcttcccggg   180
ttccgatcgc tttgcccggc cggacttcag ggacatttcc aaatggaaca accgcgtagt   240
gagcaacctg ctctattacc agaccaacta cctggtggtg gctgccatga tgatttccat   300
tgtggggttt ctgagtccct tcaacatgat cctgggagga atcgtggtgg tgctggtgtt   360
cacagggttt gtgtgggcag cccacaataa agacgtcctt cgccggatga agaagcgcta   420
ccccacgacg ttcgttatgg tggtcatgtt ggcgagctat ttcctatct ccatgtttgg    480
aggagtcatg gtctttgtgt ttggcattac ttttcctttg ctgttgatgt ttatccatgc   540
atcgttgaga cttcggaacc tcaagaacaa actggagaat aaaatggaag gaataggttt   600
gaagaggaca ccgatgggca ttgtcctgga tgccctagaa cagcaggaag aaggcatcaa   660
cagactcact gactatatca gcaaagtgaa ggaataaaca taacttacct gagctagggt   720
tgcagcagaa attgagttgc agcttgccct tgtccagacc tatkttctgc ttgcgttttt   780
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tcctattgtg tctgaagttt cacgtgtgtt tatgaaatct aatgggaaat ggatcacacg   960
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gccacctgtt tgatgtgcag tggaaactgg ttaagccagt tgttcatact tcstttacaa  1260
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ttccngtarg ttccccttaa agaccccccg                                    1529
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<210> 627
<211> 1218
<212> DNA
<213> Homo sapiens

<400> 627

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gggccatgcg tatttctttg gagaaaggtc tatccaggtc ctttgcctat ttttaattga   180
gttgtctttt tttttaagt tttctgtttt cctaaccact agactaccag ggatgagcct    240
tctttttatt attgagttgg gtgagctatt tgtatattct agacgccagt cttttatcag    300
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tcctttgaga cacaaaactt tttaactttg atgatttcca agatacgtat tttttttcta   420
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gattaatgcc tgtgtttttct tctaagaact tgtatagttt tagttctcac aatggtcttt   540
gatccatttc gagtatattt ttatatatga tgtgatgtag gggtccagct tcattctttt   600
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caggactaga cctttagtct tctgaggtcc agccccttag gctgtctgtc atcactgtac  1080
ccaagtgatg tcactaccaa ggccaaatga tggtgggcta aattttaatt ctaaaagtg   1140
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aaaaaaaaaa aaaaaagg                                                 1218
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415

<210> 628
<211> 831
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)..(5)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (10)..(11)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (15)..(15)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (27)..(27)
<223> n equals a,t,g, or c

<400> 628
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cttcctggat gtgtttgtct ctcttggctg cactggcctg ctctgctgga gacacatggg     180
cttcagaagt tggccccagtt ctgagtaaaa gttctccaag actgataaca acctgggaga    240
aagttccagt tggtaccaat ggaggagtta cagtggtggg ccttgtctcc agtctccttg     300
gtggtacctt tgtgggcatt gcatacttcc tcacacagct gatttttgtg aatgatttag     360
acatttctgc cccgcagtgg ccaattattg catttggtgg tttagtgga ttactaggat       420
caattgtgga ctcatactta ggggctacaa tgcagtatac tgggttggat gaaagcactg      480
gcatggtggt caacagccca acaaataakg caaggcacat agcagggaaa cccattcttg      540
ataacaacgc agtgaatctg ttttcttctg ttcttattgc cctcttgctc ccaactgctg      600
cttggggttt ttggcccagg gggtgaactt tatttcattt ccmcaggttg aaactgaatg      660
ggcagttcat gktaaaatcm cttttcatgg aaagagctct atgtaacagc ataataaaac      720
tgsctaccta gcagcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagggcg      780
gccgctctag aggatccaag cttacgtacg cgtgcatgcgacatcatagc t              831
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<210> 629
<211> 637
<212> DNA
<213> Homo sapiens

<400> 629
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ggcagccaca gggaggacat gtggcctcag gaagcctggg tgtgtatcct ggttctgcta     180
ggaacacgtg tggggctttg tgtgggtgac tctctggctc cccaagcctc cctttcctac     240
tgttatatcc ttaaagtgcc tctgaggcca aagcctttgt ggcaattgtc aaatgagtcc     300
atatgcagtg agtaccgtgt tgagggagga caaggtcacc aagagctgag aatgtttctc     360
cgactgatga gacctagata ttgggtacat ggaggtcccc ggtccctttg tgattcctgc     420
agcctgttgc ctccttgcct ggaccccgcc tcagctcaga aagccaattc cctagattcc     480
aaaggccttc ccagaccaat tagcatgtcc tgcagctgtc agctccctgt gcctagcctg     540
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416

gacctcagct catgtctagc acccagtctc ccaaccccac acatattcac aaataaaaga , 600
aaataacaaa tgaaaaaaaa aaaaaaaaa aaaaaat 637

<210> 630
<211> 3337
<212> DNA
<213> Homo sapiens

<400> 630
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ctcttcttaa gaaagttttt ctagactaat gtctagatta aacttctttt ctttgacaat 180
aatgatgcca tgacttggac aaaaatgccca ttgcctctgg gtcctgcttt cttcacccag 240
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gtaaaacaca tggtttaact agtcctccag gaacaacamt gagcaatcct gacctgggac 420
tactttactc ggccatctcc tacttgagat gctcttgtc tctctgttca aggacacctt 480
ttctgagcct ttcttgaaca agagtggagg accgataggc gattaaactg tccttgacac 540
aactttagag cttcwactga gaatctagaa gagagtagat ggaaaaatat ttttccctcc 600
cctccaaatg caaggataat cttacacgag tccaggagga aggctcattc cacactaagt 606
gttctgaatc aaaaagatga acaaaataca gtgccattct tcaaggrctt cacagtctac 720
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417

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<210> 631
<211> 2733
<212> DNA
<213> Homo sapiens

<400> 631
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tagtcatgta cccaccgccg ccgccgccgc dcatcggga cttcatctcg gtgacgctga     180
gctttggcga gagctatgac aacagcaaga gttggcggcg gcgctcgtgc tggaggaaat     240
ggaagcaact gtcgagattg cagcggaata tgattctctt cctccttgcc tttctgcttt     300
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<211> 1547
<212> DNA
<213> Homo sapiens

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caaggcccgg ctgttccggc tgtggctggt gctggggtcg gtgttcatga tcctgctgat     180
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cgtgcgcgac cccttcgtgc gccgatctc cgccttccgc agcaagttcg agctggagaa      900
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tcccctggc ctggaggcag cagctgtata aactctacga ggccgacttt gttctcttcg    1320
gctaccccaa gcccgaaaac ctcctccgag actgaaagct ttcgcgttgc ttttttctcgc    1380
gtgcctggaa cctgacgcac gcgcactcca gttttttat gacctacgat tttgcaatct    1440
gggcttcttg ttcactccac tgcctctatc cattgagtac tgtatcgaa ttgttttta     1500
agattaatat atttcaggta tttaatacga aaaaaaaaa aaaaaaa                  1547


<210> 633
<211> 1380
<212> DNA
<213> Homo sapiens

<400> 633
cagacccgcg gggcaaacgg actggggcca agagccggga gcgcgggcgc aaaggcacca      60
gggcccgccc agggcgccgc gcacacggcc ttggggggttc tgcgggcctt cgggtgcgcg     120
tctcgcctct agccatgggg tccgcagcgt tggagatcct gggcctggtg ctgtgcctgg     180
tgggctgggg gggtctgatc ctggcgtgcg ggctgcccat gtggcaggtg accgccttcc     240
tggaccacaa catcgtgacg gcgcagacca cctggaaggg gctgtggag tcgtgcgtgg      300
tgcagagcac gggcacatgc agtgcaaagt gtacgactcg gtgctggctc tgagcaccga     360
ggtgcaggcg gcgcgggcgc tcaccgtgag cgccgtgctg ctggcgttcg ttgcgctctt     420
cgtgaccctg gcgggcgcgc agtgcaccac ctgcgtggcc ccgggcccgg ccaaggcgcg     480
tgtggccctc acgggaggcg tgctctacct gttttgcggg ctgctggcgc tcgtgccact     540
ctgctggttc gccaacattg tcgtccgcga gttttacgac ccgtctgtgc ccgtgtcgca     600
gaagtacgag ctgggcgcac gctgtacatc ggctgggcgg ccaccgcgct gctcatggta     660
ggcggctgcc tcttgtgctg cggcgcctgg gtctgcaccg gcgtcccga cctcagcttc      720
cccgtgaagt actcagcgcc gcggcggccc acggccaccg gcgactacga caagaagaac     780
```

419

```
tacgtctgag ggcgctgggc acggccgggc ccctcctgcc agccacgcct gcgaggcgtt    840
ggataagcct ggggagcccc gcatggaccg cggcttccgc cgggtagcgc ggcgcgcagg    900
ctcctcggaa cgtccggctc tgcgccccga cgcggctcct ggatccgctc ctgcctgcgc    960
ccgcagctga ccttctcctg ccactagccc ggccctgccc ttaacagacg gaatgaagtt   1020
tccttttctg tgcgcggcgc tgtttccata ggcagagcgg gtgtcagact gaggatttcg   1080
cttcccctcc aagacgctgg gggtcttggc tgctgccta cttcccagag gctcctgctg    1140
acttcggagg ggcggatgca gagcccaggg cccccaccgg aagatgtgta cacctggtct   1200
ttactccatc ggcagggccc gagcccaggg accagtgact tggcctggac ctcccggtct   1260
cactccagca tctcccccagg caaggcttgt gggcaccgga gcttgagaga gggcgggagt   1320
gggaaggcta agaatctgct tagtaaatgg tttgaactct caaaaaaaaa aaaaaaaaa    1380

<210> 634
<211> 610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (25)..(25)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (74)..(74)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (76)..(76)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (486)..(486)
<223> n equals a,t,g, or c

<400> 634
ccaggtaccg gcccggaaat tcttnggtcg acccacgcgt ccggcatgac gaacttctcc     60
cttgttccca gccnantcct agaatatgtt gcctcttctc aaaaataacg taccacaaag    120
cctctggtga cggtggagca aaggaataga tggtgaatgt ctcataccca cttcggatcc    180
agaacaggcc taggagagac tcaggtggga tctgctgctg aggaaaggag ttggggctga    240
agttggagga agagggcagc tctaaaccac ctattcctgg ctctaggcct ctcaggccag    300
acagccccca cccgtttctg cagatgcccg catcatggtc ctgaggggat gggggctggc    360
ctggagcytt tcccccgtgg tgtgtggcta tagcggggac atgaagggg tgtgttgggg    420
acgtagtgac cactcccttc taccgtcaga ratcctgctt cccctgccc cctgcacty     480
ctcggntgtc cttcataacc ccccacccac tccccacctg ccatctcctg tgcttgtgcg    540
gatccaggaa gcacctacct gggcacagag atcatcgctc ggtgcctcgc ccctacacaa    600
gggcgattaa                                                         610

<210> 635
<211> 659
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (616)..(616)
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420

<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (620)..(620)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (631)..(631)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (644)..(644)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (649)..(649)
<223> n equals a,t,g, or c

<400> 635
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ctacgagttt tttttttttt ttttctgtc  agcctcataa acatttttaa tgacccacat      60
agcatgacat atacagtatc atgttttccc taagagaaat tactttacat tgactttaat     120
gacttgccct cacagcttta gatttcactt gctaaagtat tttgattgtg catttaattt     180
aaaaagaaac ctctaaacat ttttttagtt gcaaaaaatt ccaactttac caggagagaag    240
aacattttgg ggtgttcaac tgtactggga atgttttat  tttaagctgg ttagtgaata     300
catgggtgtt cattttatta cctcatatac ttcatatgtt ttaaataata atacatttaa     360
aaatatgctt tcttttattc agatttctga tgctagagga atatgttcag ttagtttact     420
tgtcctgaaa tttaaacagt aaccatttaa attacgtgag ctgtaaagag attggcattt     480
ttctgtgagt tgttccagac actaggccca gtgctgttaa agatgagccc cgcattctct     540
ccaaatgaca ccaggcccat cattgtgttc ctaggctcaa gctcttctcc gctggcatga    600
tgctcatcag gtctanagcn caaaaggaga nttcggtggg tagnggggng gatagattt     659
```

<210> 636
<211> 189
<212> DNA
<213> Homo sapiens

<400> 636
```
gaaagaatgg ctcctctgtt tataacacac ccaacaggaa tctggggtca atgtgatgag      60
aggcacaaag cttgtggcct ccctacaaac aaatgcctac atgtgaagag gaaaaaaaat     120
tatagaatct gggtagtggg tgtatgggtg ttcactgtat aattctttca acaatctcct     180
atgtttgaa                                                             189
```

<210> 637
<211> 637
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (358)..(358)
<223> n equals a,t,g, or c

<220>

421

```
<221> misc_feature
<222> (523)..(523)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (552)..(552)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (589)..(589)
<223> n equals a,t,g, or c

<400> 637
ttttatatat atatatatat atatatataa aatgccagaa agcagttttc ttgacatagt      60
agaaaagaat gtgcttggga attcaagctc tatagcaaca agacagagaa gattgtatta     120
gtaagattgt atatcttcca gtgtcacctg tatatcccct aaactcctca cctatatcac     180
aaaaacctgc caaggcagaa tacattccct tgggaaagga gctttggcgg gcaagcaggc     240
atcgggtccc atctgacacc agcgtgatcg ccacaggagc catctaggaa aggggaatgg     300
aaactgagat gctggcactt tgggccctgc caatgagcta aagcagtgta taattaanga     360
attgcacagg cttccttccc caggacaaag cagcgcacag tcttcttgga ttactgtcct     420
cttacagcaa taattacctg tggataatag attatattat tggaagggca caacgcttg      480
ctgccagcca cgtcttcttg gtgggctgcc acttctgctg canaactgat gagcatcatg     540
ccaccggaga anacttgagc ctaggacaac atgatgggcc tggtgtcant tggagagaat     600
gcgggctcat ctttacagcc ttgggcctaa tggctgc                             637

<210> 638
<211> 1830
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (67)..(67)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (97)..(97)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (211)..(211)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1813)..(1813)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1830)..(1830)
<223> n equals a,t,g, or c
```

<400> 638
```
gcgaccgcgc ccttcagcta gctcgctcgc tcgctctgct tccctgctgc cggctgcgca      60
tggcttnggc gttggcggcg ctggcggcgg tcgagcngcc tgcgsagccg gtaccagcag     120
ttgcagaatg aagaagagtc tggagaacct gaacaggctg caggtgatgc tcctccacct     180
tacagcagca tttctgcaga gagcgcacat nattttgact acaaggatga gtctgggttt     240
ccaaagcccc catcttacaa tgtagctaca acctgccca gttatgatga agcggagagg      300
accaaggctg aagctactat cccttttggtt cctgggagag atgaggattt tgtgggtcgg     360
gatgattttg atgatgctga ccagctgagg ataggaaatg atgggatttt catgttaact     420
tttttcatgg cattcctctt taactggatt gggttttcc tgtcttttg cctgaccact      480
tcagctgcag gaaggtatgg ggccatttca ggatttggtc tctctctaat taaatggatc     540
ctgattgtca ggttttccac ctatttccct ggatattttg atggtcagta ctggctctgg     600
tgggtgttcc ttgtttagg ctttctcctg tttctcagag gatttatcaa ttatgcaaaa     660
gttcggaaga tgccagaaac tttctcaaat ctccccagga ccagagttct ctttatttat     720
taaagatgtt ttctggcaaa ggccttcctg catttatgaa ttctctctca agaagcaaga     780
gaacacctgc aggaagtgaa tcaagatgca gaacacagag gaataatcac ctgctttaaa     840
aaaataaagt actgttgaaa agatcatttc tctctatttg ttcctaggtg taaaattta     900
atagttaatg cagaattctg taatcattga atcattagtg gttaatgttt gaaaaagctc     960
ttgcaatcaa gtctgtgatg tattaataat gccttatata ttgtttgtag tcattttaag    1020
tagcatgagc catgtccctg tagtcggtag ggggcagtct tgctttattc atcctccatc    1080
tcaaaatgaa cttggaatta aatattgtaa gatatgtata atgctggcca ttttaaaggg    1140
gttttctcaa aagttaaact tttgttatga ctgtgttttt gcacataatc catatttgct    1200
gttcaagtta atctagaaat ttattcaatt ctgtatgaac acctggaagc aaaatcatag    1260
tgcaaaaata catttaaggt gtggtcaaaa ataagtcttt aattggtaaa tataagcat     1320
taattttta tagcctgtat tcacaattct gcggtacctt attgtaccta agggattcta    1380
aaggtgttgt cactgtataa aacagaaagc actaggatac aaatgaagct taattactaa    1440
aatgtaattc ttgacactct ttctataatt agcgttcttc acccccaccc ccacccccac    1500
cccccttatt ttcctttgt ctcctggtga ttaggccaaa gtctgggagt aaggagagga    1560
ttaggtactt aggagcaaag aaagaagtag cttggaactt ttgagatgat ccctaacata    1620
ctgtactact tgcttttaca atgtgttagc agaaaccagt gggttataat gtagaatgat    1680
gtgctttctg cccaagtggt aattcatctt ggtttgctat gttaaaatg taaatacaac     1740
agaacattaa taaatatctc ttgtgtagca cctttaaaa aaaaaaaaa aaaaaaaaa     1800
aaaaaaaaaa aancccgggg ggggccccn                                     1830
```

<210> 639
<211> 1025
<212> DNA
<213> Homo sapiens

<400> 639
```
cctggcccac attgcttcat tggcctggcc atgcgcctgt actatggcag ccgctagtcc      60
ctgacaactt ccaccctgat tccggaccct gtagattggg cgccaccacc agatccccct     120
cccaggcctt cctccctctc ccatcagcag ccctgtaaca agtgccttgt gagaaaagct     180
ggagaagtga gggcagccag gttattctct ggaggttggt ggatgaggg gtaccctagg     240
agatgtgaag tgtgggtttg gttaaggaaa tgcttaccat cccccacccc caaccaagtt     300
cttccagact aaagaattaa ggtaacatca atacctaggc ctgagaaata accccatcct     360
tgttgggcag ctccctgctt tgtcctgcat gaacagagtt gatgaaagtg gggtgtgggc     420
aacaagtggc tttccttgcc tactttagtc acccagcaga gccactggag ctggctagtc     480
cagcccagcc atggtgcatg actcttccat aagggatcct cacccttcca ctttcatgca     540
agaaggccca gttgccacag attatacaac cattacccaa accactctga cagtctcctc     600
cagttccagc aatgcctaga gacatgctcc ctgccctctccacagtgctg ctccccacac     660
ctagcctttg ttctggaaac cccagagagg ctgggcttg actcatctca gggaatgtag     720
cccctgggcc ctggcttaag ccgacactcc tgacctctct gttcaccctg agggctgtct     780
tgaagcccgc tacccactct gaggctccta ggaggtacca tgcttcccac tctggggcct     840
gcccctgcct agcagtctcc cagctcccaa cagcctgggg aagctctgca cagagtgacc     900
tgagaccagg tacaggaaac ctgtagctca atcagtgtct ctttaactgc ataagcaata     960
agatcttaat aaagtcttct aggctgtagg gtggttccta caaccacagc caaaaaaaaa    1020
aaaaa                                                              1025
```

<210> 640
<211> 2454
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2317)..(2317)
<223> n equals a,t,g, or c

<400> 640
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ggtcgaccca cgcgtccgct tccatgtcaa atgtatgact gttatttctt cttctggaag      60
agcctacctg gacgtagaca ttactctgtc ctcagaagct ttccataatt acatgaatgc     120
tgccatggtg cacatcaaca gggccctgaa actcattatt cgtctctttc tggtagaaga     180
tctggttgac tccttgaagc tggctgtctt catgtggctg atgacctatg ttggtgctgt     240
ttttaacgga atcacccttc taattcttgc tgaactgctc attttcagtg tcccgattgt     300
ctatgagaag tacaagaccc agattgatca ctatgttggc atcgcccgag atcagaccaa     360
gtcaattgtt gaaaagatcc aagcaaaact ccctggaatc gccaaaaaaa aggcagaata     420
agtacatgga aaccagaaat gcaacagtta ctaaaacacc atttaatagt tataacgtcg     480
ttacttgtac tatgaaggaa aatactcagt gtcagcttga gcctgcattc caagcttttt     540
ttttaatttg gtgttttctc ccatcctttc cctttaaccc tcagtatcaa gcacaaaaat     600
tgatggactg ataaaagaac tatcttagaa ctcagaagaa gaaagaatca aattcatagg     660
ataagtcaat accttaatgg tggtagagcc tttacctgta gcttgaaagg ggaaagattg     720
gaggtaagag agaaaatgaa agaacacctc tgggtccttc tgtccagttt tcagcactag     780
tcttactcag ctatccatta tagttttgcc cttaagaagt catgattaac ttatgaaaaa     840
attatttggg gacaggagtg tgataccttc cttggttttt ttttgcagcc ctcaatcct     900
atcttcctgc cccacaatgt gagcagctac ccctgatact ccttttcttt aatgatttaa     960
ctatcaactt gataaataac ttataggtga tagtgataat tcctgattcc aagaatgcca    1020
tctgataaaa aagaatagaa atggaaagtg ggactgagag ggagtcagca ggcatgctgc    1080
ggtggcggtc actccctctg ccactatccc cagggaagga aaggctccgc catttgggaa    1140
agtggtttct acgtcactgg acaccggttc tgagcattag tttgagaact cgttcccgaa    1200
tgtgctttcc tccctctccc ctgcccacct caagtttaat aaataaggtt gtactttct    1260
tactataaaa taaatgtctg taactgctgt gcactgctgt aaacttgtta gagaaaaaaa    1320
taacctgcat gtgggctcct cagttattga gtttttgtga tcctatctca gtctgggggg    1380
gaacattctc aagaggtgaa atacagaaag ccttttttttc ttgatctttt cccgagattc    1440
aaatctccga ttcccatttg ggggcaagtt ttttttcttca ccttcaatat gagaattcag    1500
cgaacttgaa agaaaaatca tctgtgagtt ccttcaggtt ctcactcata gtcatgatcc    1560
ttcagaggga atatgcactg gcgagtttaa agtaagggct atgatatttg atggtcccaa    1620
agtacggcag ctgcaaaaag tagtggaagg aaattgtcta cgtgtcttgg aaaaattagt    1680
taggaatttg gatgggtaaa aggtacccct gccttactcc atctatttt cttagccccc    1740
tttgagtgtt ttaactggtt tcatgtccta gtaggaagtg cattctccat cctcatcctc    1800
tgccctccca ggaagtcagt gattgtcttt ttgggcttcc cctccaaagg accttctgca    1860
gtggaagtgc cacatccagt tcttttcttt tgttgctgct gtgtttagat aattgaagag    1920
atctttgtgc cacacaggat ttttttttttt tttaagaaaa acctatagat gaaaaattac    1980
taatgaaact gtgtgtacgt gtctgtgcgt gcaacataaa aatacagtag cacctaagga    2040
gcttgaatct tggttcctgt aaaatttcaa attgatgtgg tattaataaa aaaaaaaaa    2100
acacaaaaaa aaaaaaaaa agggcggccg ctctagaga tccaagctta cgtacgcgtg    2160
catgcgacgt catagctctt ctatagtgtc acctaaattc aattcactgg ccgtcgtttt    2220
acaacgtcgt gactgggaaa accctggcgt tacccaactt aatcgccttg cagcacatcc    2280
ccctttcgcc agctggcgta atagcgaaga ggcccgnacc gatcgscctt cccaacagtt    2340
gcgcagcctg aatggcraat gggacgcgcc ctgtagcggc gcattaagcg cggcggktgt    2400
ggtggttacc cgcagcgtga ccgttacact gccagtggc cctagcggcc cgct    2454
```

<210> 641
<211> 1775
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (820)..(820)
<223> n equals a,t,g, or c

<400> 641
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gcggcgcggg tggggttgt gcgttttacg caggctgtgg cagcgacgcg gtccccagcc    60
tgggtaaaga tggccccatg gcccccgaag ggcctagtcc cagctgtgct ctggggcctc   120
agcctcttcc tcaacctccc aggacctatc tggctccagc cctctccacc tccccagtct   180
tctcccccgc ctcagcccca tccgtgtcat acctgccggg gactggttga cagctttaac   240
aagggcctgg agagaaccat ccgggacaac tttggaggtg gaaacactgc ctgggaggaa   300
gagaatttgt ccaaatacaa agacagtgag acccgcctgg tagaggtgct ggagggtgtg   360
tgcagcaagt cagacttcga gtgccaccgc ctgctggagc tgagtgagga gctggtggag   420
agctggtggt ttcacaagca gcaggaggcc ccggacctct ccagtggct gtgctcagat    480
tccctgaagc tctgctgccc cgcaggcacc ttcgggccct cctgccttcc ctgtcctggg   540
ggaacagaga ggccctgcgg tggctacggg cagtgtgaag gagaagggac acgagggggc   600
agcgggcact gtgactgcca agccggctac ggggtgagg cctgtggcca gtgtggcctt     660
ggctactttg aggcagaacg caacgccagc catctggtat gttcggcttg ttttggcccc   720
tgtgcccgat gctcaggacc tgaggaatca aactgtttgc aatgcaagaa gggctgggcc   780
ctgcatcacc tcaagtgtgt agactgtgcc aaggcctgcn taggctgcat gggggcaggg   840
ccaggtcgct gtaagaagtg tagccctggc tatcagcagg tgggctccaa gtgtctcgat   900
gtggatgagt gtgagacaga ggtgtgtccg ggagagaaca agcagtgtga aaacaccgag   960
ggcggttatc gctgcatctg tgccgagggc tacaagcaga tggaaggcat ctgttggaag  1020
gagcagatcc cagagtcagc aggcttcttc tcagagatga cagaagacga gttggtggtg  1080
ctgcagcaga tgttctttgg catcatcatc tgtgcactgg ccacgctggc tgctaagggc  1140
gacttggtgt tcaccgccat cttcattggg gctgtggcgg ccatgactgg ctactggttg  1200
tcagagcgca gtgaccgtgt gctggagggc ttcatcaagg gcagataatc gcggccacca  1260
cctgtaggac ctcctcccac ccacgctgcc cccagagctt gggctgccct cctgctggac  1320
actcaggaca gcttggttta tttttgagag tggggtaagc acccctacct gccttacaga  1380
gcagcccagg tacccaggcc cgggcagaca aggcccctgg ggtaaaaagtagccctgaag   1440
gtggatacca tgagctcttc acctggcggg gactggcagg cttcacaatg tgtgaatttc  1500
aaaagttttt ccttaatggt ggctgctaga gctttggccc ctgcttagga ttaggtggtc  1560
ctcacagggg tggggccatc acagctccct cctgccagct gcatgctgcc agttcctgtt  1620
ctgtgttcac cacatcccca caccccattg ccacttattt attcatctca ggaaataaag  1680
aaaggtcttg gaaagttaaa aaaaaaaaaa aaaaaaaaaa aaaaaactcg agggggggcc  1740
cgtacccaat cgccctatga tgtagtcgta ttaca                            1775
```

<210> 642
<211> 1379
<212> DNA
<213> Homo sapiens

<400> 642
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gcggcgcggg tggggttgt gcgttttacg caggctgtgg cagcgacgcg gtccccagcc    60
tgggtaaaga tggccccatg gcccccgaag gcctagtccc agctgtgctc tggggcctca   120
gcctcttcct caacctccca ggacctatct ggctccagcc ctctccacct ccccagtctt   180
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agggcctgga gagaaccatc cgggacaact ttggaggtgg aaacactgcc tgggaggaag   300
agaatttgtc caaatacaaa gacagtgaga cccgcctggt agaggtgctg agggtgtgt    360
gcagcaagtc agacttcgag tgccaccgcc tgctggagct gaggaggag ctggtggaga    420
gctggtggtt tcacaagcag caggaggccc cggacctctt ccagtggctg tgctcagatt   480
ccctgaagct ctgctgcccc gcaggcacct tcgggccctc ctgccttccc tgtcctgggg   540
gaacagagag gccctgcggt ggctacgggc agtgtgaagg agaagggaca cgaggggca     600
gcgggcactg tgactgccaa gccggctacg ggggtgaggc ctgtggccag tgtggccttg   660
gctactttga ggcagaacgc aacgccagcc atctggtatg ttcggcttgt tttggcccct   720
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425

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gtgcccgatg ctcaggacct gaggaatcaa actgtttgca atgcaagaag ggctgggccc      780
tgcatcacct caagtgtgta gacattgatg agtgtggac agagggagcc aactgtggag       840
ctgaccaatt ctgcgtgaac actgagggct cctatgagtg ccgagactgt gccaaggcct      900
gcctaggctg catgggggca gggccaggtc gctgtaagaa gtgtagccct ggctatcagc      960
aggtgggctc caagtgtctc gatgtggatg agtgtgagac agaggtgtgt ccgggagaga     1020
acaagcagtg tgaaaacacc gagggcggtt atcgctgcat ctgtgccgag ggctacaagc     1080
agatggaagg catctgtgtg aaggagcaga tcccaggtgc attcccatc ttaactgatt      1140
taaccccctga aacaacccga cgctggaagt tgggttctca tccccactct acatatgtaa     1200
aaatgaagat gcagagagat gaagctactt tcccagggct atatggcaag caagtcgcaa     1260
agctgggatc ccaatccaga cagtctgacc gtggaacgag actcatacac gtaataaatg     1320
ctctgccccc aacttgtcca ccacaaaaaa aaaaaaaaaa aaaaaaaag ggcggccgc       1379

<210> 643
<211> 1508
<212> DNA
<213> Homo sapiens

<400> 643
ggcacagaga tagagcggca acctcggaag tgcggacggg tgggcctata tagatgttga       60
ggtgcggagg ccgtgggctt ttgttgggcc tggctgtagc cgcagcagcg gtaatggcag      120
cacggcttat gggctggtgg ggtccccgcg ctggctttcg ccttttcata ccggaggagc      180
tgtctcgcta ccgcggcggc ccaggggacc gggcctgta cttggcgttg ctcggccgtg       240
tctacgatgt gtcctccggc cggagcacta cgagcctggg tcccactata gcggcttcgc      300
aggccgagac gcatccagag ctttcgtgac cggggactgt tctgaagcag gcctcgtgga      360
tgacgtatcc gacctgtcag ccgctgagat gctgacactt cacaattggc tttcattcta      420
tgagaagaat tatgtgtgtg ttgggagggt gacaggacgg ttctacggag aggatgggct      480
gcccacccccg gcactgaccc aggtagaagc tgcgatcacc agaggcttgg aggccaacaa     540
actacagctg caagagaagc agacattccc gccgtgcaac gcggagtgga gctcagccag      600
gggcagccgg ctctggtgct cccagagag tggaggtgtg agcagagact ggattggcgt       660
ccccaggaag ctgtataagc caggtgctaa ggagcccccgc tgcgtgtgtg tgagaaccac     720
cggcccccct agtggccaga tgccggacaa ccctccacac agaaatcgtg gggacctgga     780
ccacccaaac ttggcagagt acacaggctg cccaccgcta gccatcacat gctcctttcc     840
actctaagcc gtagcctctt ctgttaataa cacacagaga gctctgccaa gcacctgagt      900
aggcccttga cacttgtgtg ccctgggatg cctcctggcg cgaatcagga gggtctggaa     960
ggactctggc tatattctgc aaatgtggct catgcccctt accgtggctc ggcgttgtgg     1020
tgcctgaggg acagccggcc acctgcccag tactggtcag cttttcaaca ctattccctt     1080
tgacctactg gccatcttcc tcacagccct cagatatcaa cgggcacaaa taagaccaac     1140
tcaatttcca cttgaattta caaccaaaag cctgctgagt tgattacagc tgggccaata     1200
cagtacgagg caataacaaa ttagtgtggg ttgattctgg aattggaaaa gttttgctt      1260
gtatggatac agcaaatcca gatgtctctg aacaaagcaa caatttaaag caacgacatt     1320
ttctgtcctt taagcactta aaatcaggtg tggtgtgttt tcaaaggcag aagtctgcat     1380
tttgagcaaa aggtggcttc ccagctctaa caaggtaact ggttagcatg acattaaagc     1440
ttgggcaagg cttcaaactt aaaaaaaaaa aaaaaaaaaa aaaaaaaaa aaaaaaaaa        1500
aactcgag                                                              1508

<210> 644
<211> 1412
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1362)..(1362)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
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426

<222> (1369)..(1369)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1397)..(1397)
<223> n equals a,t,g, or c

<400> 644
cccttcatct gcgttgccag gaaccctgtc agcagaaact tctcaagccc catccttgcc   60
aggaagctct gtgaaggtgc tgctgatgac ccagattcct ccatggtcct cctgtgtctc   120
ctgttggtgc ccctcctgct cagtctcttt gtactggggc tatttctttg gtttctgaag   180
agagagagac aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact   240
cctaacatat gcccccattc tggagagaac acagagtacg acacaatccc tcacactaat   300
agaacaatcc taaaggaaga tccagcaaat acggtttact ccactgtgga aataccgaaa   360
aagatggaaa atccccactc actgctcacg atgccagaca caccaaggct atttgcctat   420
gagaatgtta tctagacagc agtgcactcc cctaagtctc tgctcaaaaa aaaaacaatt   480
ctcggcccaa agaaacaat cagaagaatt cactgatttg actagaaaca tcaaggaaga   540
atgaagaacg ttgacttttt tccaggataa attatctctg atgcttcttt agatttaaga   600
gttcataatt ccatccactg ctgagaaatc tcctcaaacc cagaaggttt aatcacttca   660
tcccaaaaat gggattgtga atgtcagcaa accataaaaa aagtgcttag aagtattcct   720
ataaaaatgt aaatgcaagg tcacacatat taatgacagc ctgttgtatt aatgatggct   780
ccaggtcagt gtctggagtt tcattccatc ccagggcttg gatgtcagga ttataccaag   840
agtcttgcta ccaggagggc aagaagacca aaacagacag acaagtccag cagaagaaga   900
tgcacctgac aaaaatggat gtattaattg gctctataaa ctatgtgccc agcaytatgc   960
tgagcttaca ctaattggtc agacatgctg tctgccctca tgaaattggc tccaaatgaw   1020
tgaactactt tcatgagcag ttgtagcagg cctgaccaca gattcccaga gggccaggtg   1080
tggatccaca ggacttgaag gtcaaagttc acaaagatga agaatcaggg tagctgacca   1140
tgtttggcag atactataat ggagacacag aagtgtgcat ggcccaagga caaggacctc   1200
cagccaggct tcatttatgc acttgtctgc aaaagaaaag tctaggtttt aaggctgtgc   1260
cagaacccat cccaataaag agaccgagtc tgaagtcaca ttgtaaatct gtgtaggag   1320
acttggagtc aggcagtgag actggtgggg cacgggggc antgggtant gtaaaccttt   1380
taaagatggt taattcntca ttagtgtttt tt   1412

<210> 645
<211> 1306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1300)..(1300)
<223> n equals a,t,g, or c

<400> 645
aattcccggg tcgacccacg cgtccggaat ttaagggacc cacactacct tcccgaagtt   60
gaaggcaagc ggtgattgtt tgtagacggc gctttgtcat gggacctgtg cggttgggaa   120
tattgctttt cctttttttg gccgtgcacg aggcttgggc tgggagttg aaggaggagg   180
acgatgacac agaacgcttg cccagcaaat gcgaagtgtg taagctgctg agcacagagc   240
tacaggcgga actgagtcgc accggtcgat ctcgagaggt gctggagctg gggcaggtgc   300
tggatacagg caagaggaag agacacgtgc cttacagcgt ttcagagaca aggctggaag   360
aggccttaga gaatttatgt gagcggatcc tggactatag tgttcacgct gagcgcaagg   420
gctcactgag atatgccaag ggtcagagtc agaccatggc aacactgaaa ggcctagtgc   480
agaaggggt gaaggtggat ctgggatcc ctctggagct ttgggatgag cccagcgtgg   540
aggtcacata cctcaagaag cagtgtgaga ccatgttggargargaggar gaagaggagg   600
aagaggaagg gggagacaag atgaccaaga caggaagcca ccccaaactt gaccgagaag   660
atctttgacc cttgcctttg agcccccagg aggggaaggg atcatggaga gccctctaaa   720

```
gcctgcactc tccctgctcc acagctttca gggtgtgttt atgagtgact ccacccaagc    780
ttgtagctgt tctctcccat ctaacctcag gcaagatcct ggtgaaacag catgacatgg    840
cttctggggt ggagggtggg ggtggaggtc ctgctcctag agatgaactc tatccagccc    900
cttaattggc aggtgtatgt gctgacagta ctgaaagctt tcctctttaa ctgatcccac    960
ccccacccaa aagtcagcag tggcactgga gctgtgggct ttggggaagt cacttagctc   1020
cttaaggtct gtttttagac ccttccaagg aagaggccag aacggacatt ctctgcgatc   1080
tatatacatt gcctgtatcc aggaggctac acaccagcaa accgtgaagg agaatgggac   1140
actgggtcat ggcctggagt tgctgataat ttaggtggga tagatacttg gtctacttaa   1200
gctcaatgta acccagagcc caccatatag ttttataggt gctcaatttt ctatatcgct   1260
attaaacttt tttctttttt tctaaaaaaa aaaaaaaan actcga                    1306
```

<210> 646
<211> 729
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (702)..(702)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (710)..(710)
<223> n equals a,t,g, or c

<400> 646
```
gctggccctc gccttcaagc tggacgaggt ggccgccgtg gcggtgctcc tgtgtggctg     60
ctgtcccggc ggcaatctct ccaatcttat gtccctgctg gttgacggcg acatgaacct    120
cagcatcatc atgaccatct cctccacgct tctggccctc gtcttgatgc ccctgtgcct    180
gtggatctac agctgggctt ggatcaacac ccctatcgtg cagttactac ccctagggac    240
cgtgaccctg actctctgca gcactctcat acctatcggg ttgggcgtct tcattcgcta    300
caaatacagc cgggtggctg actacattgt gaaggtttcc ctgtggtctc tgctagtgac    360
tctggtggtc cttttcataa tgaccggcac tatgttagga cctgaactgc tggcaagtat    420
ccctgcagct gtttatgtga tagcaatttt tatgcctttg gcaggctacg cttcaggtta    480
tggtttagct actctcttcc atcttccacc caactgcaag aggactgtat gtctgaaac     540
aggtagtcag aatgtgcagc tctgtacagc cattctaaaa ctggcctttc accgaattya    600
taggaagcat gkacatgktt cctttgctgk atgcactttt ycagtctgca raascggga     660
tttttgkttt aatctataaa akgtatggaa rtgaaatgtt gnaccaagcn agaatccttt    720
tagattaaa                                                            729
```

<210> 647
<211> 1180
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)..(6)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>

<221> misc_feature
<222> (14)..(14)
<223> n equals a,t,g, or c

<400> 647
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tccccnggnt gcangattcg gcagaggttt taggaatcct ggtctcagga cctcatggaa      60
gaagaggggg agagagttac aggttggaca tgatgcacac tatgggccc cagcgacgtg       120
tctggttgag ctcagggaat atggttctta gccagtttct tggtgatatc cagtggcact      180
tgtaatggcg tcttcattca gttcatgcag ggcaaaggct tactgataaa cttgagtctg      240
ccctcgtatg agggtgtata cctggcctcc ctctgaggct ggtgactcct ccctgctggg      300
gccccacagg tgaggcagaa cagctagagg gcctccccgc ctgcccgcct tggctggcta      360
gctygcctct cctgtgcgta tgggaacacc tagcacgtgc tggatgggct gcctctgact      420
cagaggcatg gccggatttg gcaactcaaa accaccttgc ctcagctgat cagagtttct      480
gtggaattct gtttgttaaa tcaaattagc tggtctctga attaaggggg agacgacctt      540
ctctaagatg aacagggttc gccccagtcc tcctgcctgg agacagttga tgtgtcatgc      600
agagctctta cttctccagc aacactcttc agtacataat aagcttaact gataaacaga      660
atatttagaa aggtgagact tgggcttacc attgggttta aatcataggg acctagggcg      720
agggttcagg gcttctctgg agcagatatt gtcaagttca tggcttagg tagcatgtat       780
ctggtcttaa ctctgattgt agcaaaagtt ctgagaggag ctgagccctg ttgtggccca      840
ttaaagaaca gggtcctcag gccctgcccg cttcctgtcc actgccccct ccccatcccc      900
agcccagccg agggaatccc gtgggttgct tacctaccta taaggtggtt tataagctgc      960
tgtcctggcc actgcattca aattccaatg tgtacttcat agtgtaaaaa tttatattat     1020
tgtgaggttt tttgtctttt tttttttttt tttttttggt atattgctgt atctactta      1080
acttccagaa ataaacgtta tataggaacc gtcaaaaaaa aaaaaaaaaa aaaaaaaaa      1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa                             1180
```

<210> 648
<211> 941
<212> DNA
<213> Homo sapiens

<400> 648
```
ggcacgagcc tggacgcagc agccaccgcc gcgtccctct ctccacgagg ctgccggctt      60
aggaccccca gctccgacat gtcgccctct ggtcgcctgt gtcttctcac catcgttggc     120
ctgattctcc ccaccagagg acagacgttg aaagatacca cgtccagttc ttcagcagac     180
tcaactatca tggacattca ggtcccgaca cgagccccag atgcagtcta cacagaactc     240
cagcccacct ctccaacccc aacctggcct gctgatgaaa caccacaacc ccagacccag     300
acccagcaac tggaaggaac ggatgggcct ctagtgacg atccagagac acacaagagc     360
accaaagcag ctcatcccac tgatgacacc acgacgctct ctgagagacc atccccaagc     420
acagacgtcc agacagaccc ccagaccctc aagccatctg gttttcatga ggatgacccc     480
ttcttctatg atgaacacac cctccggaaa cgggggctgt tggtcgcagc tgtgctgttc     540
atcacaggca tcatcatcct caccagtggc aagtgcaggc agctgtcccg gttatgccgg     600
aatcattgca ggtgagtcca tcagaaacag gagctgacaa cccgctgggc acccgaagac     660
caagcccccct gccagctcac cgtgcccagc ctcctgcatc ccctcgaaga gcctggccag      720
agagggaaga cacagatgat gaagctggag ccaggctgc cggtccgagt ctcctacctc      780
ccccaacccct gcccgcccct gaaggctacc tggcgccttg gggctgtcc ctcaagttat      840
ctcctctgtt aagacaaaaa gtaaagcact gtggtctttg aaaaaaaaaa aaaaaaaaaa      900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a                         941
```

<210> 649
<211> 988
<212> DNA
<213> Homo sapiens

<400> 649
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ggcagcagcc accgccgcgt ccctctctcc acgaggctgc cggcttagga ccccagctc       60
cgacgtaagt ccctctcgcg cgccacctcc atccgctgcc cctctgccca cgggccgggc     120
```

```
tcasatgtcg ccctctggtc gcctgtgtct tctcaccatc gttggcctga ttctccccac    180
cagaggacag acgttgaaag ataccacgtc cagttcttca gcagactcaa ctatcatgga    240
cattcaggtc ccgacacgag ccccagatgc agtctacaca gaactccagc ccacctctcc    300
aaccccaacc tggcctgctg atgaaacacc acaaccccag acccagaccc agcaactgga     60
aggaacggat gggcctctag tgacagatcc agagacacac aagagcacca aagcagctca    420
tcccactgat gacaccacga cgctctctga gagaccatcc ccaagcacag acgtccagac    480
agaccccag accctcaagc catctggttt tcatgaggat gaccccttct tctatgatga    540
acacaccctc cggaaacggg ggctgttggt cgcagctgtg ctgttcatca caggcatcat    600
catcctcacc agtggcaagt gcaggcagct gtcccggtta tgccggaatc attgcaggtg    660
agtccatcag aaacaggagc tgacaaccyg ctgggcaccc gaagaccaag ccccctgcca    720
gctcaccgtg cccagcctcc tgcatcccct cgaagagcct ggccagagag ggaagacaac    780
gatgatgaag ctggagccag ggctgccggt ccgagtctcc tacctccccc aaccctgccc    840
gcccctgaag gctacctggc gccttggggg ctgtccctca agttatctcc tctgytaaga    900
caaaaagtaa agcactgtgg tctttgcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa    960
aaaaaaaaaa aaaaaaaaaa aactcgag                                       988
```

<210> 650
<211> 1172
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (904)..(904)
<223> n equals a,t,g, or c

<400> 650
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ggcgggccga ggactccagc gtgcccaggt ctggcatcct gcacttgctg cccttgaca     60
cctgggaaga tggccggccc gtggaccttc acccttctct gtggtttgct ggcagccacc    120
ttgatccaag ccaccctcag tcccactgca gttctcatcc tcggcccaaa agtcatcaaa    180
gaaaagctga cacaggagct gaaggaccac aacgccacca gcatcctgca gcagctgccg    240
ctgctcagtg ccatgcggga aaagccagcc ggagcatccc tgtgctgggc agcctggtga    300
acaccgtcct gaagcacrtc atctggctga aggtcatcac agytaacatc ctccagctgc    360
aggtgaagcc ctcggccaat gamcaggagc tgctagtcaa gatccccctg gacatggtgg    420
ctggattcaa cacgcccctg gtcaagacca tcgtggagtt ccacatgacgactgaggccc    480
aagccaccat ccgcatggac accagtgcaa gtggccccac ccgcctggtc ctcagtgact    540
gtgccaccag ccatgggagc ctgcgcatcc aactgctgca taagctctcc ttcctggtga    600
acgccttagc taagcaggtc atgaacctcc tagtgccatc catgccaagg tggcccaact    660
gatcgtgctg gaagtgtttc cctccagtga gccctccgc cctttgttca ccctgggcat    720
cgaagccagc tcggaagctc agttttacac caaaggtgac caacttatac tcaacttgaa    780
taacatcagc tctgatcgga tccagctgat gaactctggg attggctggt tccaacctga    840
tgttctgaaa aacatcatca ctgaratcat ccactccatc ctgtgccga accagaatgg    900
caanttaaga ctggggtccc agtgtcattg gtgaaggcct tgggattcga ggcagctgag    960
tcctcactga ccaaggatgc ccttgtgctt actccagcct ccttgtggaa acccasctct   1020
cctgtctccc agtgaagact tggatggcag ccatcaggga argctgggtc ccagctggga   1080
rtatgggtgt gagctctata gaccatccct ctctgcaatc aataaacact tgcctgtgaa   1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                                 1172
```

<210> 651
<211> 526
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (283)..(283)
<223> n equals a,t,g, or c

430

<400> 651

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gggacgtgc  acgggccgc  cctcctggcc  ctgaagctgc  gccggcctcc  ctgagcgttt      60
cgctgcggag  ggaagtccac  tctcggggag  agatgctgat  gccggtccac  ttcctgctgc     120
tcctgctgct  gctcctgggg  ggccccagga  caggcctccc  ccacaagttc  tacaaagcca     180
agcccatctt  cagctgcctc  aacaccgccc  tgtctgaggc  tgagaagggc  cagtgggagg     240
atgcatccct  gctgagcaag  aggagcttcc  actacctgcg  canaagsacg  cctcttcggg     300
agaggaggag  gagggcaaag  agaaaaagac  tttccccatc  tctggggcca  ggggtggarc     360
cagaggcacc  cggtacagat  acgtgtccca  agcacagccc  aggggaaagc  cacgccagga     420
cacggccaag  agtccccacc  gcaccaagtt  caccctgtcc  ctcgacgtcc  ccaccaacat     480
catgaacctc  ctcttcaaca  tcgccaaggc  caagaactgc  gtgccc                     526
```

<210> 652
<211> 1566
<212> DNA
<213> Homo sapiens

<400> 652

```
cgcgtccggc  gcccggcagc  tgtccaccga  tcccggccac  cgccccggc   caccccacc      60
ccgcgagccc  atggaggctc  cgggaccccg  cgccttgcgg  actgcgctct  gtggcggctg     120
ttgctgcctc  ctcctatgtg  cccagctggc  tgtggctggt  aaaggagctc  gaggctttgg     180
gaggggagcc  ctgatccgcc  tgaatatctg  gccgcgggtc  caaggggcct  gcaaacagct     240
ggaggtctgt  gagcactgcg  tggagggaga  cagagcgcgc  aatctctcca  gctgcatgtg     300
ggagcagtgc  cggccagagg  agccaggaca  ctgtgtggcc  caatctgagg  tggtcaagga     360
aggttgctcc  atctacaacc  gctcagaggc  atgtccagct  gctcaccacc  accccaccta     420
tgaaccgaag  acagtcacaa  cagggagccc  cccagtccct  gaggcccaca  gccctggatt     480
tgacggggcc  agctttatcg  gaggtgtcgt  gctggtgttg  agcctacagg  cggtggcttt     540
ctttgtgctg  cacttcctca  aggccaagga  cagcacctac  cagacgctgt  gagtacctgg     600
ccagcagcaa  gtacctgagt  cccagctcac  ctcctggttc  ctgccccacc  gttccccttc     660
agtacccagg  gtgctgtctt  ctccatgggc  aagccctcag  gacggtgaca  gcgtgctcca     720
tgtgagccac  accccttttg  tctcctccag  ttggggtgtt  tcctttgtca  gatgttggct     780
gggaccagga  ctcagcctgg  gccagtctag  gagcccagct  gagccctcct  gtgtcttttc     840
ccttcatgct  gccagcaggg  aagagaacca  gtaggtgcca  gcccaggcaa  gcctgtggcc     900
cgcgtttctg  tggctgtggg  caggagctgg  gccttgtgtc  tagttgggtt  ttgctctgag     960
aagggagct   gtgcctgagg  ccctctgtgt  gccgtgtgtg  ctgtggggcg  ggtcgccaca    1020
gcctgtgtta  aagtgtttgc  tcttcctctg  ctgcctcctc  tcgaggcagg  gggtccttgg    1080
ctggctgagg  cagtgtcacc  ttcctgagtg  tcctcttutgg  cctctgcaga  atctgacccc    1140
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cttgtgggta  agcggggggc  gggggcggga  aaaactctgg  ccgccagttt  ttggtcctg    1260
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cctgcagctg  agaaaatccc  tcaaccacct  cgtctcctcc  atcgcccctg  ctgggcccec    1380
cagcctgaca  gtgggttgta  tgcctgcctc  tttccaccaa  ctggcctggg  cactgccccc    1440
aaataaagga  actctgcact  gcaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa    1500
aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa    1560
aaaaaa                                                                   1566
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<210> 653
<211> 1067
<212> DNA
<213> Homo sapiens

<400> 653

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gccttgcgga  ctgcgctctg  tggcggctgt  tgctgcctcc  tcctatgtgc  ccagctggct     180
gtggctggta  aaggagctcg  aggctttggg  aggggagccc  tgatccgcct  gaatatctgg     240
ccggcggtcc  aagggggcctg  caaacagctg  gaggtctgtg  agcactgcgt  ggagggagac     300
```

431

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agagcgcgca atctctccag ctgcatgtgg gagcagtgcc ggccagagga gccaggacac    360
tgtgtggccc aatctgaggt ggtcaaggaa ggttgctcca tctacaacg ctcagaggca    420
tgtccagctg ctcaccacca ccccacctat gaaccgaaga cagtcacaac agggagcccc    480
ccagtccctg aggcccacag ccctggattt gackgggcca gctttatcgg aggtgtcgtg    540
ctggtgttga gcctacaggc ggtggctttc tttgtgctga cttcctcaag gccaaggaca    600
gcacctacca gacgctgtga gtacctggcc agcagcaagt acctgagtcc cagctcacyt    660
ctggttcctg cccacgttcc cttcagtacc caggtgctg tcttctccac tggcaagccc    720
tcaggacggt gacagcgtgc tycatgtgag ccacacccct tttgtctyct ccagttgggg    780
tgtttccttt gtcagatgtt ggctgggacc aggactcagc ctggccagt ctaggagccc    840
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gccagcccag caacctgtgg cccgcgtttc tgtggctgtg ggcaggagct gggccttgtg    960
tctagttggg ttttgctctg agaaggggag ctgtgctgag ccctctgtg tgccgtgtgt   1020
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<210> 654
<211> 1021
<212> DNA
<213> Homo sapiens

<400> 654
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ctatggtgac cgaggacttg tgccgagcac cagacgggaa gaaaggggag gcaggaagac   180
ctggcagacg ggggcggcca ggcctcaagg gggagcaagg ggagccgggg gcccctggca   240
tccggacagg catccaaggc cttaaaggag accagggga acctgggccc tctggaaacc   300
ccggcaaggt gggctaccca gggcccagcg gccccttcg gagcccgtgg catcccggga   360
attaaaggca ccaagggcag cccaggaaac atcaaggacc agccgaggcc agccttctcc   420
gccattcggc ggaacccccc aatggggggc aacgtggtca tcttcgacac ggtcatcacc   480
aaccaggaag aaccgtacca gaaccactcc ggccgatcg tctgcactgt acccggctac   540
tactacttca ccttccaggt gctgtcccag tgggaaatct gcctgtccat cgtctcctcc   600
tcaaggggcc aggtccgacg ctccctgggc ttctgtgaca ccaccaacaa ggggctcttc   660
caggtggtgt caggggggcat ggtgcttcag ctgcagcagg gtgaccaggt ctgggttgaa   720
aaagacccca aaaagggtca catttaccag ggctctgagg ccgacagcgt cttcagcggc   780
ttcctcatct tcccatctgc ctgagccagg gaaggacccc ctcccccacc cacctctctg   840
gcttccatgc tccgcctgta aaatggggg gctattgctt cagctgctga agggagggg    900
ctggctctga gagcccccagg actggctgcc cgtgacaca tgctctaaga agctcgtttc   960
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a                                                                   1021
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<210> 655
<211> 1086
<212> DNA
<213> Homo sapiens

<400> 655
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atggtgaccg aggacttgtg ccgagcacca gacgggaaga aaggggaggc aggaagacct   180
ggcagacggg ggcggccagg cctcaagggg gagcaagggg agccggggggc ccctggcatc   240
cggacaggca tccaaggcct taaaggagac caggggggaac ctgggccctc tggaaacccc   300
ggcaaggtgg gctacccagg gcccagcggc cccctcggag cccgtggcat cccgggaatt   360
aaaggcacca agggcagccc aggaaacatc aaggaccagc cgaggccagc cttctccgcc   420
attcggcgga accccccaat ggggggcaac gtggtcatct tcgacacggt catcaccaac   480
caggaagaac cgtaccagaa ccactccggc cgattcgtct gcactgtacc cggctactac   540
tacttcacct tccaggtgct gtcccagtgg gaaatctgcc tgtccatcgt ctcctcctca   600
aggggccagg tccgacgctc cctgggcttc tgtgacacca ccaacaaggg gctcttccag   660
gtggtgtcag ggggcatggt gcttcagctg cagcagggtg accaggtctg ggttgaaaaa   720
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432

```
gaccccaaaa aggytcacat ttaccagggc tctgaggccg acagcgtctt cagcggcttc    780
ctcatcttcc catctgcctg agccagggaa ggaccccctc ccccacccac ctctcdgct    840
tccatgctcc gcctgtaaaa tggggggcgct attgcttcag ctgctgaagg gaggggggctg   900
gctctgagag ccccaggact ggctgccccg tgacacatgc tctaagaagc tcgtttcttta   960
gacctcttcc tggaataaac atctgtgtct gtgtctgctg aaaaaaaaaa aaaaaaaaaa   1020
aaaaaaaaaa aaaaaaaaaa aaaaactcg aggggggggcc cggtacccaa ttcgccgtat   1080
aatgag                                                             1086


<210> 656
<211> 1352
<212> DNA
<213> Homo sapiens

<400> 656
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ccagctgtgc ccgacaccat gtacctgccc ctggccacct ccccgatgcc cgctgggagt   180
acccctggtg ctggatggct gtggctgctg ccgggtatgt gcacggcggc tggggggagcc  240
ctgcgaccaa ctccacgtct gcgacgccag ccagggcctg gtctgccagc ccggggcagg    300
acccggtgga cgggggggccc tgtgcctctt ggcagaggac gacagcagct gtgaggtgaa   360
cggccgcctg tatcgggaag gggagacctt ccagccccac tgcagcatcc gctgccgctg    420
cgaggacggc ggcttcacct gcgtgccgct gtgcagcgag gatgtgcggcctgcccagctg    480
ggactgcccc caccccagga gggtcgaggt cctgggcaag tgctgccctg agtgggtgtg    540
cggccaagga ggggggactgg ggacccagcc ccttccagcc caaggacccc agtttttctgg   600
ccttgtctct tccctgcccc ctggtgtccc ctgcccagaa tggagcacgg cctgggggacc   660
ctgctcgacc acctgtgggc tgggcatggc cacccgggtg tccaaccaga accgcttctg    720
ccgactggag acccagcgcc gcctgtgcct gtccaggccc tgcccaccct ccaggggtcg    780
cagtccacaa aacagtgcct tctagagccg ggctgggaat ggggacacgg tgtccaccat    840
ccccagctgg tggccctgtg cctgggcct gggctgatgg aagaggtcc gtgcccaggc    900
ccttggctgc aggcaacact ttagcttggg tccaccatgc agaacaccaa tattaacacg    960
ctgcctggtc tgtctggatc ccgaggtatg gcagaggtgc aagacctagt cctctttcct   1020
ctaactcact gcctaggagg ctggccaagg tgtccagggt cctctagccc actccctgcc   1080
tacacacaca gcctatatca aacatgcaca cgggcgagct ttctctccga cttcccctgg    1140
gcaagagatg ggacaagcag tcccttaata ttgaggctgc agcaggtgct gggctggact   1200
ggccatttt ctgggggtag gatgaagaga aggcacacag agattctgga tctcctgctg    1260
cctttttctgg agtttgtaaa attgttcctg aatacaagc tatgcgtgaa aaaaaaaaa   1320
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                                1352


<210> 657
<211> 1337
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1337)..(1337)
<223> n equals a,t,g, or c

<400> 657
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gaagacccac ctcctggcct tctccctcct ctgcctcctc tcaaaggtgc gtacccagct   120
gtgcccgaca ccatgtacct gccctggcc acctccccga tgcccgctgg gagtaccct    180
ggtgctggat ggctgtggct gctgccgggt atdgcacgg cggctggggg agccctgcga   240
ccaactccac gtctgcgacg ccagccaggg cctggtctgc cagcccgggg caggacccgg   300
tggmcggggg gccctgtgcc tcttggcaga ggacgacagc agctgtgagg tgaacggccg   360
cctgtatcgg gaaggggaga ccttccagcc ccactgcagc atccgctgcc gctgcgagga   2A0
cggcggcttc acctgcgtgc cgctgtgcag cgaggatgtg cggctgccca gctgggactg   480
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433

```
ccccacccc   aggagggtcg   aggtcctggg   caagtgctgc   cctgagtggg   tgtgcggcca        540
aggaggggga   ctggggaccc   agccccttcc   agcccaagga   ccccagtttt   ctggccttgt        600
ctcttccctg   cccctggtg   tccctgccc   agaatggagc   acggcctggg   gaccctgctc         660
gaccacctgt   gggctgggca   tggccacccg   ggtgtccaac   cagaaccgct   tctgccgact        720
ggagacccag   cgccgcctgt   gcctgtccag   gccctgccca   ccctccaggg   gtcgcagtcc        780
acaaaacagt   gccttctaga   gccgggctgg   gaatggggac   acggtgtcca   ccatcccga         840
ctggtggccc   tgtgcctggg   ccctgggctg   atggaagatg   gtccgtgccc   aggcccttgg        900
ctgcaggcaa   cactttagct   tgggtccacc   atgcagaaca   ccaatattaa   cacgctgcct        960
ggtctgtctg   gatcccgagg   tatggcagag   gtgcaagacc   tagtccyctt   tcctctaact       1020
cactgcctag   gaggctggcc   aaggtgtcca   gggtcctcta   gcccactccc   tgcctacaca       1080
cacagcctat   atcaaacatg   cacacgggcg   agctttctct   ccgacttccc   ctgggcaaga       1140
gatgggacaa   gcagtccctt   aatattgagg   ctgcagcagg   tgctgggctg   gactggccat       1200
ttttctgggg   gtaggatgaa   gagaaggcac   acagagattc   tggatctcct   gccccttttt       1260
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aaaaaaaaaa   aaaaan                                                             1337
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<210> 658
<211> 2092
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (637)..(637)
<223> n equals a,t,g, or c

<400> 658
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gccctggggg   acaacgtgaa   acaatactgg   gctaacctaa   agctgtggtt   caagcagaag        120
atcagcaaag   aggagtttga   ccttgaagct   catagacttc   tcacacagga   taatgtccat        180
tctcacaatg   atttcctcct   ggccattctc   acgcgttgtc   agattttggt   ttctacacca        240
gatggtgctg   gatctttgcc   ttggccaggg   ggttccgcag   caaaacctgg   gaaaacccaa        300
gggaaagaaa   aagctttctt   ctgttcgtca   gaaatttgat   catagattcc   agcctcaaaa        360
tcctctctca   ggagcccagc   aatttgtggc   aaaggatccc   caagatgatg   acgacttgaa        420
actttgttcc   cacacaatga   tgcttcccac   tcgaggccag   cttgaaggga   gaatgatagt        480
gactgcttat   gagcatgggc   tggacaatgt   caccgaggag   gctgtttcag   ctgttgtcta        540
tgctgtggag   aatcacctta   aagatatact   gacgtcagtt   gtgtaagaa   ggaaagctta        600
tcggttacga   gatggtcatt   ttaaatatgc   ctttggnagt   aacgtgaccc   cgcagccata        660
cctgaagaat   agtgtagtag   cttacaacaa   cttaatagaa   agccctccag   cttttactgc        720
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tgcactcctg   ctggcatgct   ccggagacac   tctacctgca   tctttgcctc   cggtgaacat        840
gtacgatctt   tttgaagctt   tgcaggtgca   cagggaagtc   atccctacac   atactgtcta        900
tgctcttaac   attgaaagga   tcatcacgaa   actctggcat   ccaaatcatg   aagagctgca        960
gcaagacaaa   gttcaccgcc   agcgcttggc   agccaagga   gggcttttgc   tgtgctaaat       1020
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ttgggtccac   atttcaaggc   tgaagtgtgt   agtgtatata   taacctttcc   tatggaaatg       1140
tgacattgag   tacattttgt   gttgctgttg   tgaagccatt   aatataaatc   tttggtaatg       1200
acccatatct   ctatatgtat   gtgttcccag   ttgtgggagc   aggcactaat   gaaatcctgt       1260
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agatgacatc   ctagaacaaa   gaagctgttt   taacttaatc   ccctgatca   gcaggatatc       1380
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taaagaatgt   gttcttgcat   tttggttgaa   ataacctaca   cagtgttaaa   aatcagatac       1500
ctcctttagt   gaccagttca   aattttaata   gcgataggta   gcccctgaga   aatttatcac       1560
tataactcca   caggaaatat   gacttggaag   tgctctgtgt   actaaacaaa   ataaagcccc       1620
tctttgcatt   taaaaccaaa   gtcaaaacaa   aactcttgta   atgcaattaa   ttaacttyat       1680
gtcttcccat   gactcaagtt   ttgttaaata   tgcccaaaaa   ctttgattgg   cagtttcttc       1740
ggttaattat   tcctatagaa   tgtatttaa   gaaatctata   caaattggat   atatgcttgg       1800
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taattctcca gtttctagga ggtacctæt tctaccgttt caagtgatga agtgaaaata   1860
atttacattc gatagtgtta ctgataacaa acctacttaa gagatatgtt gctttttact   1920
taagggatag tgttgataga taaattagaa tgtatagata ggtttgtgaa agtctaaata   1980
atggctgtat agatatgtat atatggttca cayatctgga tctgtgtatt tgattttgæt   2040
ctttaaatgt gacaaataaa ccttttggga gaaaaaaaa aaaaaaaaac tc           2092
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<210> 659
<211> 2494
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (920)..(920)
<223> n equals a,t,g, or c

<400> 659
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gcgcttcaag gtcagtgcaa ggctgcaggg tgcatcctgg acacccaga acggcccgca   180
ggagcgcctg gctggggagg tggccaggag ccccctgaag gagttcraca aggagaagc    240
ctggagagcc gtcgtggtgc aaatggccca gtgaccccca gacgcggaaa ccgggtggca   300
gckcccagcc tggccccaag catggaaacg cacaacccct aatcgccctg agctactgct   360
tctaacacct cttttccctt gtgtgagggc aaaccaggct gcaggtgggg ttttcacttc   420
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cttcctgcct ctctcatggc ttgggctgga gtgggctctc tggacctgaccagactgtgg   660
gtccctgcgt ctcctgccca ctctgaccgg gcttcctccc tccacgctta gggtctgtcc   720
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gctgctctcc aggtgaaatn cacaccagtc cacgccgggt cgcctgccct gtctccctac   960
ttagacccag tcattctaga gggatccamc gccamctgg ccggcccacg tcctgggtgc   1020
tgtcatgccc agcttggagt gccacgtggc cgctgcccac gtccgggca ctgtcatgcc   1080
cagcttggag tgccacatgg ccgctgccca cgtcccgggc actgtcatgc ccagcttgga   1140
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tggctttggg tagtgccatg gccaggagtg ggtttccctg cgtctcctcg tcccgagggc   1560
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aagatcaaag aaccaggagg cctgggagat gcagctggat ggggcggcct gcagaccctg   1860
ccaggggggtt tgaggaccct cccagtttc ccætgcgga acaggagtga ctctggctgc   1920
caagatacct tcatggtgtt catgacaagt ggaatcatta ttttcaacca ttgaaggggg   1980
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tcctcggcag ctccggaagg acacagtcag gggccgggca aacactttgg ccacagcccc   2010
aaacaagcgc caccgtggga gaggagaggc tgctgtcact ggtaccggat gcagacccca   2160
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ggaatggggt gggagccaca gggacgaccc ggggcgggct gatgtcttct tgggggcaga   2280
ccagagagct caagtttcag agtcagaæt aggcacttgg agcgtttttg ctggcttgca   2340
ctttcttatt ttcttatttt agagcgctta aaaaatccgg aaaaatgggg tttaaaagaa   2400
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435

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ctgtctcttt cagtctacat ttttgtttaa tacgcttgag caataaacgc tgacttgcag   2460
acgtgaaaaa aaaaaaaaaa aaaaaaaaac tcga                                2494


<210> 660
<211> 1957
<212> DNA
<213> Homo sapiens

<400> 660
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ctgactgagt gcctgacggt ggaccccctc agtgccagcg tctggaggca gctgtaccct    180
aagcacctgt cacagtccag ccttctgctg gagcacttgc tcagctcctg ggagcagatt    240
cccaagaagg tacagaagtc tttgcaagaa accattcagt ccctcaagct taccaaccag    300
gagctgctga ggaagggtag cagtaacaac caggatgtcg tcacctgtga catggcctc    360
aagggcctgt tgcagcaggt tcagggtcct cggctgccct ggacgcggct cctcctgttg    420
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gcctccctta ctggccggtt gcttcgatca tctggcttct tacctgctag ccaacaagcg    540
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ctttgcctac aggacattac agtggctttc ttggactggg cacttgccct gatatcccag   1020
cagtaggccc tgccttcctg gccactgatt tctgcatggg tagaccatcc aagactgcag   1080
cgggtagaag gtggcagttc ttcatgggag tctttttaac ttggtgcctg agttctctcc   1140
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gcagcatctc agcctcctac ccacaattcc actgaacact tttctggccc tactgcacat   1260
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ttccacttcc ttccatctca tttctaaacc ccaaacagct catctctaaa aagatagaac   1380
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gaagaatata gcaccgcatt gggaaacagc agcctcacct ccacctgaag cctgggtgtg   1560
gctgtcagtg gacatgggga gctggatgga aatgcctctc attcaaaat gcccagcctg   1620
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tccattcccc atcatgctgg gggtcttggt cacaaggctc agcttctctc cactgtccat   1740
ccctcctatc atctgtagag cagagcacag gcagttgtgt gccttgggcc caggaaccc   1800
tccatcaacc tgagacagga ctcagtatat ggttcttggg tatgccctac caggtggaat   1860
aaaggacaca gatttgattt ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                            1957


<210> 661
<211> 730
<212> DNA
<213> Homo sapiens

<400> 661
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gggctgggca gcatcggacg gccctcaaca catactactc cctggctgcc agcacccttg    120
gcacctttgc cttgtcagcc cttgtagggg aagatgggag gcttgacatg gtccacatcc    180
aaaatgcagc gctggctgga ggggttgtgg tggggacctc aagtgaaatg atgctgacac    240
cctttggggc tctggcagct ggcttcttgg ctgggactgt ctccacgctg gggtacaagt    300
tcttcacgcc catccttgaa tcaaaattca aagtccaaga cacatgtgga gtccacaacc    360
tccatgggat gccggggggtc ctgggggccc tcctggggt ccttgtggct ggacttgcca    420
cccatgaagc ttacggagat ggcctggaga gtgtgtttcc actcatagcc gagggccagc    480
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436

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gcatgccacg tcacaggcca tgcaccagct cttcgggctg tttgtcacac tgatgtttgc    540
ctctgtgggc ggggggccttg gaggcatcat attggtctta tgacctccta gacccctgtg    600
ccctgtggca tgggtggcam cctcctccat ggtggggggc agagaagcct cacagatcct    660
cccctaccac caccagggct cctgctgaag ctacccttc tggactcccc ccccagactc    720
ccagcactac                                                            730


<210> 662
<211> 550
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (76)..(76)
<223> n equals a,t,g, or c

<400> 662
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aaagcccaga gacctntgag ggtggaggag gcagacactc aggcctaacc caytgccagc    120
ccctgagrgg acacgctcct tttcgaagat gctgactggc tgctactagg aagttctttt    180
tgagctccca ttcctccagc tgcaagaagg gagccatgag ccagaaggag gccccttccc    240
acaggcagcg tctccacagg gagaggggca acaggaggct gggaaatggt ggggagtggg    300
gccgtaactg ggtacaatag ggggaacctc accagatgcc caacccgact gccctaccag    360
cctgcacatg ggtagaagag gccaaattga ggcacccaag tgatccactg gccccacgtc    420
acacagttac agtgaagccc aagccaggcc tggttgaggg tgataaacgc cactgtctct    480
aaaaaaaaaa aaaaaaaaaa aaaaaaactc gagggggggc ccgtacccaa tcgcctaaga    540
tgtatgctat                                                            550


<210> 663
<211> 807
<212> DNA
<213> Homo sapiens

<400> 663
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gccctgacct ggaacctctg ggagggctgc agagtaagtg ccgcctctgc gctccgacgg    120
aggcacgagg cctgtggagt aggtccctct gttccgacag gtgcgacact tggcgctcca    180
tgcttgcggg tgccgggagg cctggcctcc cccaggccg ccacctctgc tggttgctct    240
gtgctttcac cttaaagctc tgccaagcag aggctcccgt gcaggaagag aagctgtcag    300
caagcacctc aaatttgcca tgctggctgg tggaagagtt tgtggtagca gaagagtgct    360
ctccatgctc taatttccgg gctaaaacta cccctgagtg tggtcccaca ggatatgtag    420
agaaaatcac atgcagctca tctaagagaa atgagttcaa aagctgccgg ttcagctttg    480
aatggaacaa cgcttatttt ggagttcga aaggggctgt cgtgtgtgtg gccctgatct    540
tcgcttgtct tgtcatcatt cgtcagcgac aattggacag aaaggctctg gaaaaggtcc    600
ggaagcaaat cgagtccata tagctacatt ccacccttgt atcctgggtc ttagagaccc    660
tatctcagac agtgaaagtg aaatggactg atttgcactc ttggttcttt ggagcttgt    720
ggtggaatcc ccttttcccc atcttcttct ttcagatcat taatgagcag aataaaaaga    780
gtaaaatggt aaaaaaaaaa aaaaaaa                                         807


<210> 664
<211> 946
<212> DNA
<213> Homo sapiens

<400> 664
ggcacgagtg agattgcatc cagacagagt tttaaaagtt ccccggttga gtttaatgta     60
cagttgaagt tgagacatga atctctgcat gtaggggaaa ttttgtgtct ggttagtcaa    120
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437

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gaaactatgg aaaccaattc ttgatatttt gaaccattca cgaagatagt ttgagtcatg    180
agcatgctgt tgtctagagt gggcggggat gactcattgg agtggatgcg ctgcttgta     240
cttgattttt ttgagtctga aattagcttt ccaggctggg gcagggaggg gagcacaggt    300
gggatcagta ctgcccccaa gcggtggagc tgtggtggtg gatcaatact gctgccgcct    360
gtctgcacaa acatatttct ctcttccagc ccttcagaag tgtattggaa tatgtcgata    420
acaataatga tggtagtgaa gatgatgatg atgtgggtaa ttctggctac cttattgggt    480
ccaagctccc cacaattcgt tgcacaaagc actctacata cattctcttt agtcctgatc    540
aaaccacctt tcagagtagg atttagtgtc ctattttaaa gatgaaggag ctcgggctca    600
gagagagatc gtttagacac acacacaact ttggaatgaa acatttacagccgggcgcgg    660
tggcgcgtgc ctgtagtccc agctacttgg gaggctgagg ctggaggatc gcttgagtcc    720
aggagttctg ggctgtagtg cgctatgccg atcgggtgtc cgcactaagt ttggcatcaa    780
tatggtgacc tcccgggagt ggaggaccac caggttgcct aaggaggggt gaaccggtcc    840
aggtcggaat gaaacattta caaaaattga catttcctta tgcatagata tttcactagg    900
tccttaaaac ccacgtgaat ctgtgattaa aaaaaaaaaa aaaaaa                   946


<210> 665
<211> 1145
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (410)..(410)
<223> n equals a,t,g, or c

<400> 665
caggcagang ggctgagtca caggcacagg tgaggaactc aactcaaact cctctctctg     60
ggaaaacgcg gtgcttgctc ctcccggagt ggccttggca gggtgttgga gccctcggtc    120
tgccccgtcc ggtctctggg gccaaggctg ggtttccctc atgtatggca agagctctac    180
tcgtgcggtg cttcttctcc ttggcataca gctcacagct ctttggccta tagcagctgt    240
ggaaatttat acctcccggg tgctggaggc tgttaatggg acagatgctc ggttaaaatg    300
cactttctcc agctttgccc ctgtgggtga tgctctaaca ggacctgga attttcgtcc    360
tctagacggg ggacctgagc agtttgtatt ctactaccac atagatcccn ttccaaccca    420
tgagtgggcg gtttaaggac cgggtgtctt gggatgggaa tcctgagcgg tacgatgcct    480
ccatccttct ctggaaactg cagttcgacg acaatgggac atacacctgc caggtgaaga    540
acccacctga tgttgatggg gtgatagggg asatccggct cagcgtcgtg cacactgtac    600
gcttctctga gatccacttc ctggctctgg ccattggctc tgcctgtgca ctgatgatca    660
taatagtaat tgtagtggtc ctcttccagc attaccggaa aaagcgatgg gccgaaagag    720
ctcataaagt ggtggagata aaatcaaaag aagaggaaag gctcaaccaa gagaaaaagg    780
tctctgttta tttagaagac acagactaac aattttagat ggtaaggttc acaaataggt    840
tgatttcttt cttcagcttt ctgacatgtc cagcccatct ctaatgagga ctcccagatc    900
atcactttat ggctgttarg tgtttcccat atgaaattag aggagctggg tcagggagac    960
aaaagtcttc tattagtctt atggatagct cctccttgag tgtattttgt gcaaaagatt   1020
aagaagctgg actctactgc cattaaagct gagagaatcc taaggttatt tgtggcttcg   1080
gggttatatt tattactact actactaata aatattcaac aagtaaataa atctttttta   1140
aatca                                                               1145


<210> 666
<211> 869
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> (765)..(765)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (800)..(800)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (847)..(847)
<223> n equals a,t,g, or c

<400> 666
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ggacaagcca tgtgccagac ctagtcaacc tgtctctcaa tgacaacgat ggctccagtg      60
gggcttcaga ccaggatacc ctggctcctc tgcctggggc cacccccctgg cccctgctgc     120
ccactttctc ctaccagtac cdgccccac accccctacag cccgcagcct ccaccctacc      180
atgagctttc atcttacacc tatggtgggg gcagtgccag cagccagcat agtgagggca      240
gccggagcag tgggtcgaca cggagtgatg ggggggcagg gcgcacgggg aggcccgagg      300
agcgggcccc cgagtccaag tccggcagtg gcagtgagtc tgagccctcc agcgagggg      360
gcagccttcg gcggggtggg gaagcaagtg ggactagcga tgggggccct cctccatcca      420
gaggctcaac tggggtgcc cctaatctcc gagcccaccc agggctccat ccctatggac      480
cgccccctgg catggccctc ccctacaacc ccatgatggt ggtcatgatg cccccacctc      540
cacctccagt ccctccagca gtgcagcctc cggggggcccc tccagtcaga gacctgggct      600
ctgtgccccc agaactgaca gccagccgcc aaagcttcca catggccatg ggcaatccca      660
gcgagttctt tgtggatgtt atgtagccca ctgtggggcc aggytgggcc gggcgctcct      720
ggtgtgtgac tgggtgtcct ggccgtcatg tgcttgctct tacantgct gggctcaagc      780
ctaccagctg ctgcatacan gagattgtgg gccactgtga ctcttcacca agcatgcctg      840
gttcctnccc cccttccctt caaggggta                                       869
```

<210> 667
<211> 692
<212> DNA
<213> Homo sapiens

<400> 667
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cccactttct ctgaccagta ccttgcccca caccccctaca gcccgcagcc tccaccatac      60
catgagcttc cacatgscca tgggcaatcc cagcgagttc tttgtggatg ttatgtagcc      120
cactgtgggg ccaggctggg ccgggcgctc ctggtgtgtg actgggtgtc ctggccgtca      180
tgtgcttgct cttacagtgc ctgggctcag cctaccagct gctgccatc aggagattgt      240
ggccactgtg actctcacca gcagtgcctg gttcctcccc cttccctcag gggtagacaa      300
gggacctttg attatttta gctttgtttt tttataagcc tttttggggg ttaaaataga      360
gtttcttaca ttttttgggac ttttttaata ggcatttcct ctttttatatg aagaattccc      420
atccattggg ccccttctaa ccccagaatg tgacctcctc ctccagttac ccacagccct      480
gccctttgca gggttggggg tggtcagcgg taccccgggg ttaggcatcc tagacagcag      540
cctgaggaag ctgggagatt tgggccatgt agctgccttt gttactctat ttattttagt      600
cacttgtata aaacaccaaa taaagcaata gaggcaaact caaaaaaaa aaaaaaaaaa      660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                                   692
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<210> 668
<211> 3113
<212> DNA
<213> Homo sapiens

<400> 668

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gttattaatg accgctgagc aggcagcacc atgtcagtgt gacaactgaa tcgggtgaac      60
gatgcaccac taaccaccat ggaaacaagg aaaaataaag ccagctcaca ggatctctct     120
tcactggatt gagagcctca gcctgccgac tgagaaaaag agttccagga aaaagaagga     180
atcccggctg cagcctcctg ccttccttta tattttaaaa tagagagata agattgcgtg     240
catgtgtgca tatctatagt atatattttg tacactttgt acacagaca cacaaatgca      300
cctatttata ccgggcaaga acacaaccat gtgattatct caaccaagga actgaggaat     360
ccagcacgca aggacatcgg aggtgggcta gcactgaaac tgcttttcaa gcatcatgct     420
gctattcctg caaatactga agaagcatgg gatttaaata ttttacttct aaataaatga     480
attactcaat ctcctatgac catctataca tactccacct tcaaaaagta catcaatatt     540
atatcattaa ggaaatagta accttctctt ctccaatatg catgacattt ttggacaatg     600
caattgtggc actggcactt atttcagtga agaaaaactt tgtggttcta tggcattcat     660
catttgacaa atgcaagcat cttccttatc aatcagtcc tattgaactt actagcactg      720
actgtggaat ccttaagggc ccattacatt tctgaagaag aaagctaaga tgaaggacat     780
gccactccga attcatgtgc tacttggcct agctatcact acactagtac aagctgtaga     840
taaaaaagtg gattgtccac ggttatgtac gtgtgaaatc aggccttggt ttacacccag     900
atccatttat atggaagcat ctacagtgga ttgtaatgat ttaggtcttt taactttccc     960
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tgaatactcc acagactttc cagtaaacct tactggcctg gatttatctc aaaacaattt    1080
atcttcagtc accaatatta atgtaaaaaa gatgcctcag ctcctttctg tgtacctaga    1140
ggaaaacaaa cttactgaac tgcctgaaaa atgtctgtcc gaactgagca acttacaaga    1200
actctatatt aatcacaact tgctttctac aatttcacct ggagccttta ttggcctaca    1260
taatcttctt cgacttcatc tcaattcaaa tagattgcag atgatcaaca gtaagtggtt    1320
tgatgctctt ccaaatctag agattctgat gattggggaa aatccaatta tcagaatcaa    1380
agacatgaac tttaagcctc ttatcaatct tcgcagcctg gttatagctg gtataaacct    1440
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cgataacagg cttattaaag taccccatgt tgctcttcaa aaagttgtaa atctcaaatt    1560
tttggatcta aataaaaatc ctattataag aatacgaagg ggtgattta gcaatatgct    1620
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tgtggataac ctgccagatt taagaaaaat agaagctact aacaaccctac gattgctta    1740
cattcacccc aatgcatttt tcagactccc caagctggaa tcactcatgc tgaacagcaa    1800
tgctctcagt gccctgtacc atggtaccat tgagtctctg ccaaacctca aggaaatcag    1860
catacacagt aaccccatca ggtgtgactg tgtcatccgt tggatgaaca tgaacaaaac    1920
caacattcga ttcatggagc cagattcact gttttgcgtg gacccacctg aattccaagg    1980
tcagaatgtt cggcaagtgc atttcaggga catgatggaa atttgtctcc ctcttatagc    2040
tcctgagagc tttccttcta atctaaatgt agaagctggg agctatgttt cctttcactg    2100
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cttgcctaat accctgacag acaagttcta tgtccattct gagggaacac tagatataaa    2220
tggcgtaact cccaaagaag ggggtttata tacttgtata gcaactaacc tagttggcgc    2280
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aacaaatatg tcctaaaaac caccaaggaa acctactcca aaaatgaaca aaaaaaaaa     2940
aagcgaaaga ctgcagttgt gctaaaaaca aaacaaaaca aacaaacaaa caaaaaagta    3000
aaaaaagatt actttcgaga gagaagttta agcttcacca atggctggct cctggaccaa    3060
tgggaaatat gttacaactt tcaggcattt tttaagtgaa ctttttttt ttt           3113
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<210> 669
<211> 980
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (937)..(937)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (956)..(956)
<223> n equals a,t,g, or c

<400> 669
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tgcaggtcga cactagtgga tccaaagaat tcggcacgag gggcgttcca tcgaggcctt   120
tgatcgcagc atcgacctgc tggtgtcgcg cctgcgccag aagctggggg atgaccccaa   180
ggctccgcaa ttgatcaaga cggtacgcgg cgaaggctac ctgttcgacg cccgggatat   240
cggttgatgc gcgcgccctt caacacgctg ttcgggcgac tgttcggcct gttgctggtg   300
gcgattgtgc tggcccatgt gctggcgttc ttctggttcc accactacgg cccgccgcca   360
ccaccccgcg cggccttcgt cgaacaacca gatggcagcc tcacgccctt gcgcaaagcg   420
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cagcgcgcac gcatgctcgg cgcggtctcc cacgacctgc gcaccccgct ctcgcgcctc   720
aagttgcgcc tggaacaaat cgaagacccc aagctgcaag gccagatgcg ccaggacctg   780
gacgacatga tcggcatgct cgatgccacc ttgagctacc tgcacgaaca gcgcaccagc   840
gagacacggc attggctcga tgtacaggcg ttggtggaat ccctgagtga aaacgcccag   900
gaccaaggcc gcgacgtgca gttttttttt gggggngccc cccccggggg gggggnccca   960
aaaaccccccc cccctttttt   980

<210> 670
<211> 888
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (845)..(845)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (864)..(864)
<223> n equals a,t,g, or c

<400> 670
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tgcgccagaa gctgggggat gaccccaagg ctccgcaatt gatcaagacg gtacgcggcg   120
aaggctacct gttcgacgcc cgggatatcg gttgatgcgc gcgcccttca acacgctgtt   180
cggcgactg ttcggcctgt tgctggtggc gattgtgctg gcccatstgc tggcgttctt   240
ctggttccac cactacggcc cgccgccacc acycckygcg kccttcgtcgaacaaccaga   300
tggcagyctc acgcccttgc gcaaagcgcc tcgcccctgg ttcggcggcc cggtggtgcc   360

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cctgacattt caatttatct cgctgatcat cgctgcctgg tacggcgcca aactgctgag     420
ccggccaatc cagcgcctga gcgcagcggc cgagcgcctg agcgtcgacc tcgacagccc     480
gccctggtg  gaaaccggcc ctcgcgaagc acgccaagcg gcctcgacct tcaacctgat     540
gcaaaagcgc atccgcgaac aagtcagcca gcgcgcacgc atgctcggcg cggtctccca     600
cgacctgcgc accccgctct cgcgcctcaa gttgcgcctg gaacaaatcg aagaccccaa     660
gctgcaaggc cagatgcgcc aggacctgga cgacatgatc ggcagctcg  atgccacctt     720
gagctacctg cacgaacagc gcaccagcga gacacggcat tggctcgatg tacaggcgtt     780
ggtggaatcc ctgagtgaaa acgcccagga ccaaggccgc gacgtgcagt ttttttttgg     840
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<210> 671
<211> 1651
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1648)..(1648)
<223> n equals a,t,g, or c

<400> 671
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aagtttccat caccttttgcc tgccagtgtg tgagaggcg  agaggggcag tgagcaggtg     120
acatgcagct tccagatacc cacacactgc ttttctcccg cccagctccc accccagtta     180
attgagatgg gattgtttct ctttctggtt tcttcctaag cccctcctc  atattcctgg     240
tgtgcttatg gcctggcaca ccttgtgaaa cagaaaccca agctcctcat ttcggagctg     300
ggatttcgat tggctatctg cctccctaac caagctgtcc cttccacctc atcccctagag     360
tcaccctctg gtctcatcaa catccagtgg gcatttcagy ggcccaggat ccttcmaatt     420
gcagatataa agcatcagga ccccacacct gggatggaag cttctaggaa ttaatgaagc     480
cccagtagag gtgagggtaa acctaaaacg ggctggatag ggcctctccc aaggccctat     540
ggaaaggtga tgggaaactg ggggctgagg cctcatccta ggagacccct ggagggaccc     600
acttacccta gataggcagc ggaggccaga aactggaaaa cagccactca ttgtcggtgc     660
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gacaaccaca aaagttcatt tgagggtgcc cagtcagctg actttgcttc caccaggaat     780
acccacctgg ccctggtcct tctgctgagc tacaggaggc attcccaggg tcttagcaaa     840
aacaacccct caaataggcc cagtgcctac aactctagag aggtttcaga tggtattgga     900
gacccagaga agttaactga ctttcccaaa agtcacccac tgtaaatggc agacagatct     960
caaacccaca tctgakcctg agtccagtgt ttttctcta  gtatcatcat tgtcccttaa    1020
atgtgtttga cacatcatag tttacaaatc accttcactc atattctctc actactcatc    1080
agtcatgaat tcagccaatg agaaggctc  agagaggtta actaaccagc cacgctgtt    1140
acatgggggca tagactgctt catgaacgct tgactgcagc tttgccttcc tcatgccctc    1200
aaaaaggaag gagctgacca aagcttacta taccatagct ggggtctggg accccagcc    1260
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<210> 672
<211> 1746
<212> DNA
<213> Homo sapiens

<400> 672
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442

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<210> 673
<211> 2492
<212> DNA
<213> Homo sapiens

<400> 673
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actgtaccca actgcaacaa gccgcgctgg gagaaatggt tcatggtgac gtttgcttcc     180
tccacgctgt ggatcgcagc cttctcctac atgatggtgt ggatggtcac aatcattggt     240
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cgtgcctgac tgcatggcca gcctcattgt ggccagacaa gggatggggg acatggctgt     360
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                                  2492
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<210> 674
<211> 1579
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1529)..(1529)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1556)..(1556)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1569)..(1569)
<223> n equals a,t,g, or c

<400> 674
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tgtgaccctg tcaaggacta tgtccaggcc aacccaggct ggtactgggc atcctatgct    540
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tgggaacctg attctcctga ccgtctttac cctgtccatg gcctacctca ctgggatgct    660
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cctctcagtc accgtcttca gcttccagac caagttcgac ttcacctcct gccaggcgt     780
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444

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cttccaatat gtgccctggc tccatgcagt ttatgcagca ctgggagcgg gtgtatttac    900
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tgaggagtat atttttggag ccctcaacat ttacctagac atcactata tcttcacctt   1020
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<210> 675
<211> 587
<212> DNA
<213> Homo sapiens

<400> 675
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cggcccttgt ctgcctctca gtcaccgtct tcagcttca gaccaagttc gacttcacct    180
cctgccaggg cgtgctcttc gtgcttctca tgactctttt cttcagcgga ctcatcctgg    240
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cgagaccaga tataaaacta gctgccaacc caaaaaaaa aaaaaaa                    587
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<210> 676
<211> 2242
<212> DNA
<213> Homo sapiens

<400> 676
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cgctgcacaa cgtcacggcc gagctctttg gggccgaggc ctggggcacc cttgcggctt    180
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tcaagaatca cagtgcattg ataacaagtg tagtccctgg ggattatgat ggagattctc    360
aaatggatgt ccttctgaca tatcttccca aaaattatgc caagagtgaa ttaggagctg    420
ttatcttctg gggacaaaat caaacattag atcctaacaa tatgaccata ctcaatagga    480
cttttcaaga tgagccacta attatggatt tcaatggtga tctaattcct gatattttttg    540
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cagcattgac cactacaagt aaaatgcgaa ttccacattc tcatgcattt attgatctga    660
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agtttgaaat atgggaaaat ttggatggaa acttytstgw magtacymta ttggaaaaac    780
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cccttcatat tggagactac aatatggatg gctatccaga cgctctggtc atactaaaga   1080
acacatctgg aagcaaccag caggcctttt tactggagaa cgtcccttgt aataatgcaa   1140
gctgtgaaga ggcgcgtcga atgtttaaag tctactggga gctgacagac ctaaatcaaa   1200
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                                                        445
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tagtgctaag taaaggatat acaaagaatg attttgccat tcatacacta aaaaataact   1320
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<210> 677
<211> 2381
<212> DNA
<213> Homo sapiens

<400> 677
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tgctgcggga agaaatgac ttaatcgtct ttttggcaga ccagaatgca ccctatttta    420
aacccaaagt aaaggtatct ttcaagaatc acagtgcatt gataacaagt gtagtccctg   480
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tgttctgctt actgctatag ctctcatcgg tgtctgtgtt ttcatcttgg caataattgg   1920
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446

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tgattagttg aaacacaaat tctggcttga aaaaataggg gagattaaat attatttata    2100
aatgatgtat cccatggtaa ttattggaaa gtattcaaat aaatatggtttgaatatgtc     2160
acaaggtctt tttttttaaa gcactttgta tataaaaatt tgggttctct attctgtagt    2220
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<210> 678
<211> 1931
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1212)..(1212)
<223> n equals a,t,g, or c

<400> 678
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cggtgatcac cccctatggg gagtgcatcc tggggctgg ggggtacatc ttcaacacga   1500
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gggaggtgga ggacttgatg agggaattct actctctcaa acggagcagg tcgaaatttc   1620
agaaaaacac tgttagttcg gggccatggg aacctccagc aaggccagga acactcttct   1680
caccagaaaa ccatgaccag gcaagggaga ggaagcctgc caaacagaag gtcccacttc   1740
tcagctgccc cagtcagccc ttcacctcca agttggcatt actgggacag gttttcctag   1800
actcctcata accactggat aatttttta ttttattttt tttgaggcta aactataata   1860
aattgctttt ggctatcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa    1920
agggcggccg c                                                        1931


<210> 679
<211> 1517
<212> DNA
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<213> Homo sapiens

<400> 679
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gggtcgaccc acgcgtccgc tcgctgcggc ggcgactgag ccaggctggg ccgcgtccct      60
gagtcccaga gtcggcgcgg cgcggcaggg gcagccttcc accacgggga gcccagctgt     120
cagccgcctc acaggaagat gctgcgtcgg cggggcagcc ctggcatggg tgtgcatgtg     180
ggtgcagccc tgggagcact gtggttctgc ctcacaggag ccctggaggt ccaggtccct     240
gaagacccag tggtggcact ggtgggcacc gatgccaccc tgtgctgctc ctctcccct     300
gagcctggct tcagcctggc acagctcaac ctcatctggc agctgacaga taccaaacag     360
ctggtgcaca gctttgctga gggccaggac cagggcagcg cctatgccaa ccgcacggcc     420
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agcctgcagg tggccgctcc ctactcgaag cccagcatga ccctggagcc caacaaggac     600
ctgcggcccg gggacacggt gaccatcacg tgctccagct accagggcta ccctgaggct     660
gaggtgttct ggcaggatgg gcagggtgtg cccctgactg gcaacgúac cacgtcgcag     720
atggccaacg agcagggctt gtttgatgtg cacagcatcc tgcgggtggt gctgggtgca     780
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atgattccca agtcatcctg ctgcctttt ttcttataga cacaatgaac agaccaccca    1320
caaccttagt tctctaagtc atcctgcttg ctgccttatt tcacagtaca tacatttctt    1380
agggacacag tacactgacc acatcaccac cctcttcttc cagtgctgcg tggaccatct    1440
ggctgccttt tttctccaaa agatgcaata ttcagactga ctgaccccct gccttatttc    1500
accaaagaca cgatgca                       .                          1517
```

<210> 680
<211> 2751
<212> DNA
<213> Homo sapiens

<400> 680
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taaccctcac taaagggaac aaaagctgga gctccaccgc ggtggcggcc gctctagaac      60
tagtggatcc cccgggctgc aggaattcgg cacgagtaga gccgatctcc cgcgccccga     120
ggttgctcct ctccgaggtc tcccgcggcc caagttctcc gcgccccgag gtctccgcgc     180
cccgaggtct ccgcggcccg aggtctccgc ccgcaccatg cggctgggca gtcctggact     240
gctcttcctg ctcttcagca gccttcgagc tgatactcag gagaaggaag tcagagcgat     300
ggtaggcagc gacgtggagc tcagctgcgc ttgcctgaa ggaagccgtt ttgatttaaa     360
tgatgtttac gtatattggc aaaccagtga gtcgaaaacc gtggtgacct accacatccc     420
acagaacagc tccttggaaa acgtggacag ccgctaccgg aaccgagccc tgatgtcacc     480
ggccggcatg ctgcggggcg acttctccct gcgcttgttc aacgtcaccc cccaggacga     540
gcagaagttt cactgcctgg tgttgagcca atccctggga ttccaggagg ttttgagcrt     600
tgaggttaca ctgcatgtgg cagcaaactt cagcgtgccc gtcgtcagcg cccccacag     660
cccctcccag gatgagctca ccttcacgtg tacatccata aacggctacc ccaggcccaa     720
cgtgtactgg atcaataaga cggacaacag cctgctggac caggctctgc agaatgacac     780
cgtcttcttg aacatgcggg gcttgtatga cgtggtcagc gtgctgagga tcgcacggac     840
ccccagcgtg aacattggct gctgcataga gaacgtgctt ctgcagcaga acctgactgt     900
cggcagccag acaggaaatg acatcggaga gagagacaag atcacagaga atccagtcag     960
taccggcgag aaaaacgcgg ccacgtggag catcctggct gtcctgtgcc tgcttgtggt    1020
cgtggcggtg gccataggct gggtgtgcag ggaccgatgc ctccaacaca gctatgcagg    1080
tgcctgggct gtgagtccgg agacagagct cactggccac gtttgaccgg agctcaccgc    1140
ccagagcgtg acagggctt ccatgagacg ccaccgtgag aggccaggtg gcagcttgag    1200
catggactcc cagactgcag gggagcactt ggggcagccc ccagaaggac cactgctgga    1260
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tcccagggag aacctgctgg cgttggctgt gatcctggaa tgaggccctt tcaaaagcgt    1320
catccacacc aaaggcaaat gtccccaagt gagtgggctc cccgctgtca ctgcagtca     1380
cccacaggaa gggactggtg atgggctgtc tctacccgga gcgtgcggga ttcagcacca    1440
ggctcttccc agtaccccag acccactgtg ggtcttcccg tgggatgcgg gatcctgaga    1500
ccgaagggtg tttggtttaa aaagaagact gggcgtccgc tcttccagga cggcctctgt    1560
gctgctgggg tcacgcgagg ctgtttgcag gggacacggt cacaggagct cttctgccct    1620
gaacgctccc aacctgcctc ccgcccggaa gccacaggac ccactcatgt gtgtgcccac    1680
aagtgtagtt agccgtccac accgaggagc ccccggaagt ccccactggg cttcagtgtc    1740
ctctgccaca ttccctggga ggaacaatgt ccctcggctg ttccggtgaaaagttgagcc    1800
acctttggaa gacgcacggg tggagtttgc cagaagaaag gctgtgccag ggccgtgttt    1860
ggctacaggg gctgccgggg ctcttggctc tgcagcgaga aagacacagc ccagcagggc    1920
tggagacgcc catgtccagc aggcgcaggc ctggcaacac ggtccccaga gtcctgagca    1980
gcagttaggt gcatggagag ggtatcacct ggtggccaca gtcccccttc tcacctcagc    2040
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cactcaaccc tgagggtccc cagggtcctg atgaagacct ccgaccccag cgccaggctc    2160
ctcggagccc aacagtccca aggggcaggg agacggggtg gtcagtgct gagggggtaca     2220
gccctgggcc ctgaccagcc ccggcacctg ccatgctggt tcccggaatg aatcagctgc    2280
tgactgtctc cagaagggct ggaaaggatg ctgccaggtg acccgaggtg cactcgcccc    2340
agggagatgg agtagacagc ctggcctggc cctcgggaca cattgtctgc cccgggrcta    2400
tgggcaaatg cccctccttc ttacttccca gaatccctg acattcccag ggtcagccag      2460
gacctgttac agccctggtc acttggaact gacagctgtg tgaggcctgc acttctcaga    2520
cccagactta gaacaaaagg aggagtgagg actcaaggct acaatgaggt tccagtactt    2580
gttacaagaa attggttttc tgcaaaaaaa gtccctacc grgcctttag gtgaatgtgg       2640
gatccactcc cgcttttaac atgaaagcat tagaagatgt gtggtgttta taaaaraaaa    2700
aaaaaaaaaa ctcgaggggg ggcccgtacg ggaattcgcc ctatagtgag t              2751
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<210> 681
<211> 468
<212> DNA
<213> Homo sapiens

<400> 681
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gtgagaagat aatcctgaga ggctgcatcc tgagaaatac cagctggtgt tttggaatgg      60
ttattttttgc aggtcctgac actaaactaa tgcagaatag tggtaagaca aagtttaaaa     120
ggacaagcat tgatagattg atgaatactc tagtactatg gattttttggg tttctgatat     180
gcttgggaat tattcttgca ataggaaatt caatctggg gagtcaaact ggggaccaat       240
tcagaacttt cctctttttgg aatgaaggag agaagagctc tgtgttctcc ggattcttaa     300
cattctggtc atatattatt attctcaata cagttgtacc catttcctta tatgtgagtg      360
tggaagtaat tcgtctagga cacagttatt ttataaactg ggaccggaag atgtattaty     420
ctcgaaaagc aatacctgca gtggctcgaa cgaccacgct caatgagg                   468
```

<210> 682
<211> 181
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (178)..(178)
<223> n equals a,t,g, or c

<400> 682
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ggtcagtgtg cagatagcct tggataccag ktactgact ttcattaatc acgtcttcat       60
ctggggggagc attgccattt atttctccat tttatttaca atgcacagta atggcatctt     120
tggcatcttc ccaaaccagt ttccatttgt tggtaatgca cgacattccc tgacccanaa     180
g                                                                     181
```

449

<210> 683
<211> 612
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (47)..(47)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (534)..(534)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (537)..(537)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (563)..(563)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (565)..(565)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (591)..(591)
<223> n equals a,t,g, or c

<400> 683
cagtctgggc ttaagaaacc accagaagaa cccaaaccag aaatgcncaa gtgtaaatgc   60
aaaaattctt atagaagaaa tagcataaga atttgcacat tcggaaataa gaccaccttc   120
catgaacaag gagaagcctt tggagatatc taaactgtgc aaatgaatag tcgctggcta   180
agactgcttg caatccttcc tggccgctga tgccaacacc aatgtgagca cttttaatca   240
tgctgacatc attggctcca tcwccaatgg ccaaagtaac agcatttctg tacttcttca   300
ccagctctac cacttgggct ttctggagtg gagtgaccct gcagcaaatt acagtcttac   360
acatgcaagc aagttctagg agatcattct tgacatcact .ttctaggca tgagccaaac   420
tgtggccatt.tatgattaag gcataatctc ctgttatggt ttcttctaca atagaatcca   480
actccagctg ctgctttttt tcacaaacta catggccatt ggaaaaattt ctgnttngtc   540
caaacaaatt ttgttttgaa atnangagtt cttctctcac ttccacagca nttattccct   600
gctataggga gg   612

<210> 684
<211> 1024
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (29)..(29)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (986)..(986)
<223> n equals a,t,g, or c

<400> 684
tgctttcctg agttcttctc tcacttccnc agcattattc cctgctatcc caaacmcatc   60
attcatgtcg tcagtcagca tgttgcaggc ataaccgatg ttgatgscag tttcttgttt   120
gtctcctgtt aggacccaga tcttaatatt ggctagtgat aaacttgtaa ctgtttcaat   180
aacaccctcc tgtaacttat cttctacagc agtggcacct agtagcatca aatctctttc   240
aatttcttca tatagcccag ctattcgttc atccctctct tctgtggcaa cattcgcatc   300
ttcaagcatc ttatgccact cttaaagta cttgtcatcc aggtctctgt atgcgatggc   360
caaggtccga aggccttccc ctgcaaattc actgagggg tctgacgtca aagacaaaag   420
gacttcattg gaaggatsaa gtttctcaaa cagaatagta tctgctcctt tggaataaag   480
ctttatctgt ccttctgggt ttcgarctat gacagacatc cttttctgg tgttgttgaa   540
atccaaaaag gcaagtaatt gataagtaac tagtgttccc aattcttcta ttgttatggt   600
ctctggggtc cgggatttaa aratgaaccc aaaatttcta gcggcagtca ctagagcccc   660
ttcatcaggt gactgaactt ggtaaatcag ctctcctgcg ctattctctt ctgacattac   720
agtgtggcag agagcaagta acctaaggaa ttcatgaact ttgggatcac ccattttaat   780
ggattccatc agattgtggt caaagaactg aattctcta tccgcttgag atttgactga   840
gaaatccaca ggctcttttt cctgagttat ttctgtcttc tgatccaggt catcatgtac   900
ttcaccatag attctcccat taatggaaca tctttaaag gtcatgatgt tttgagtgag   960
ggtacccgtt ttgtcggaga aaatgnactc aatctgcccc agttcttcat tgagcgtggt   1020
cgtt   1024

<210> 685
<211> 366
<212> DNA
<213> Homo sapiens

<400> 685
gacgcgtggg agctcattat ccatcaaact cactcargtg wcacytgagt gagtttgatg   60
gataatgagc taatgtgata tctataggtc æaatttttt aaaaccaaaa ttttcaagtc   120
tgggataatc tttcctaaat gggatcaaat gaaataatat gtgtaaaaga gtcaaatgca   180
gtcctttacc atagtaactg cctatggacg ttgtctttcc cttacatgcc tgcctacact   240
taaccagatg ttggttttca agtctaatkt gtcattagtt tcaccacatt kgctcacttt   300
tkgtaacatt tttgcaagat ttgaaaactt tcagtaaatg ttttggcact attggtaaaa   360
aaaaaa   366

<210> 686
<211> 519
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (371)..(371)
<223> n equals a,t,g, or c

<400> 686
cctggttagg gtcctacagg gaaataaaat tataaccgtg gaggtacatt tctctaccag   60
aaagcaaaaa taaagcatca tgtcttaatg gttttctaca aatcaacttc taattctaca   120
gagtccttaa tctggtccct attaaattct tggtcagaca aagttacatt tcccaagaga   180
gtcaggtgac acttgagtga gtttgatgga taatgagcta atgtgatatc tataggtcac   240
aattttttaa aaccaaaatt ttcaagtctg ggataatctt tcctaaatgg gatcaaatga   300
aataatatgt gtaaaagagt caaatgcagt cctttaccat agtaactgcc tatggacgtt   360

451

```
gtctttccct nacatgcctg cctacactta accagatgtt ggttttcaat gtctaatttg      420
tcattagttt caccacattt gctcactttt tgtaacattt ttgcaagatt tgaaaacttt      480
cagtaaatgt tttggcacta ttggtaaaaa aaaaaaaaa                             519


<210> 687
<211> 1867
<212> DNA
<213> Homo sapiens

<400> 687
cccacgcgtc cgggccacag cagagacagt ggagggcagt ggagaggacc gcgctgtcct       60
gctgtcacca agagctggag acaccatctc ccaccgagag tcatggcccc attggccctg      120
cacctcctcg tcctcgtccc catcctcctc agcctggtgg cctcccagga ctggaaggct      180
gaacgcagcc aagacccctt cgagaaatgc atgcaggatc ctgactatga gcagctgctc      240
aaggtggtga cctgggggct caatcggacc ctgaagcccc agagggtgat tgtggttggc      300
gctggtgtgg ccgggctggt ggccgccaag gtgctcagcg atgctggaca caaggtcacc      360
atcctggagg cagataacag gatcgggggc cgcatcttca cctaccggga ccgaacacg       420
ggctggattg gggagctggg agccatgcgc atgcccagct ctcacaggat cctccacaag      480
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acggaggtgc acgaagtgaa gctgcgcaac tatgtggtgg agaaggtgcc cgagaagctg      600
ggctacgcct tgcgtcccca ggaaaagggc cactcgcccg aagacatcta ccagatggct      660
ctcaaccagg ccctcaaaga cctcaaggca ctgggctgca gaaaggcgat gaagaagttt      720
gaaaggcaca cgctcttgga atatcttctc ggggagggga acctgagccg gccggccgtg      780
cagcttctgg gagacgtgat gtccgaggat ggcttcttct atctcagtt cgccgaggcc      840
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gtggtggcga tgacccaggg accgcacgat gtgcacgtgc agatcgagac ctctcccccg     1020
gcgcggaatc tgaaggtgct gaaggccgac gtggtgctgc tgacggcgag cggaccggcg     1080
gtgaagcgca tcaccttctc gccgccgctg ccccgccaca tgcaggaggc gctgcggagg     1140
ctgcactacg tgccggccac caaggtgttc ctaagcttcc gcaggccctt ctggcgcgag     1200
gagcacattg aaggcggcca ctcaaacacc gatcgcccgt cggcatgat tttctacccg     1260
ccgccgcgcg agggcgcgct gctgctggcc tcgtacacgt ggtcggacgc ggcggcagcg     1320
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cacgggcctg tcgtgcgcca gctctgggac ggcaccggcg tcgtcaagcg ttgggcggag     1440
gaccagcaca gccagggtgg ctttgtggta cagccgccgg cgctctggca aaccgaaaag     1500
gatgactgga cggtccctta tggccgcatc tactttgccg gcgagcacac cgcctacccg     1560
cacggctggg tggagacggc ggtcaagttg ctgcgcgccg ccatcaagat caacagccgg     1620
aaggggcctg catcggacac ggccagcccc gaggggacg catctgacat ggaggggcag     1680
gggcatgtgc atggggtggc cagcagcccc tcgcatgacc tggcaaagga agaaggcagc     1740
caccctccag tccaaggcca gttatctctc caaaacacga cccacacgag gacctcgcat     1800
taaagtattt tcggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1860
aaaaaaa                                                               1867


<210> 688
<211> 1722
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (401)..(401)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (695)..(695)
<223> n equals a,t,g, or c
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452

<400> 688

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gggaccgcgc tgtcctgctg tcaccaagag ctggagacac catctcccac cgagagtcat        60
ggccccattg gccctgcacc tcctcgtcct cgtccccatc ctcctcagcc tggtggcctc       120
ccaggactgg aaggctgaac gcagccaaga ccccttcgag aaatgcatgc aggatcctga       180
ctatgagcag ctgctcaagg tcaccatcct ggaggcagat aacaggatcg ggggccgcat       240
cttcacctac cgggaccaga wyacgggctg gattggggag ctgggagcca tgcgcatgcc       300
cagctctcac aggatcctcc acaagctctg ccaggcctg gggctcaacc tgaccaagtt        360
cacccagtac gacaagaaca cgtggacgga ggtgcacgaa ntgaagctgc gcaactatgt       420
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gcccgaagac atctaccaga tggctctcaa ccaggccctc aaagacctca aggcactggg       540
ctgcagaaag gcgatgaaga agtttgaaag gcacacgctc ttggaatatc ttctcggga       600
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cttctatctc agcttcgccg aggccctccg gccnacagc tgcctcagcg acagactcca        720
gtacagccgc atcgtgggtg gctgggacct gctgccgcgc gcgctgctga gctcgctgtc       780
cgggcttgtg ctgttgaacg cgcccgtggt ggcgatgacc cagggaccgc acgatgtgca       840
cgtgcagatc gagacctctc ccccggcgcg gaatctgaag gtgctgaagg ccgacgtggt       900
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cacatgcagg aggcgctgcg gaggctgcac tacgtgccgg ccaccaaggtgttcctaagc      1020
ttccgcaggc ccttctggcg cgaggagcac attgaaggcg gccactcaaa caccgatcgc      1080
ccgtcgcgca tgattttcta cccgccgccg cgcgagggcg cgctgctgct ggcctcgtac      1140
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gcgctcgacg acgtggcggc attgcacggg cctgtcgtgc gccagctctg ggacggcacc      1260
ggcgtcgtca agcgttgggc ggaggaccag cacagccagg gtggctttgt ggtacagmcg      1320
ccggcgctct ggcaaaccga aaaggatgac tggacggtcc cttatggccg catctacttt      1380
gccggcgagc acaccgccta cccgcacggc tgggtggaga cggcgtcaa gtcggcgctg       1440
cgcgccgcca tcaagatcaa cagccggaag gggcctgcat cggacacggc cagccccgag      1500
gggcacgcat ctgacatgga ggggcagggg catgtgcatg gggtggccag cagcccctcg      1560
catgacctgg caaaggaaga aggcagccac cctccagtcc aaggccagtt atctctccaa      1620
aacacgaccc acacgaggac ctcgcattaa agtattttcg gaaaaaaaaa aaaaaaaaa      1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggcgg cc                        1722
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<210> 689
<211> 536
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (508)..(508)
<223> n equals a,t,g, or c

<400> 689

```
ggtcgaccca cgcgtccgcc cacgcgtccg gcttccttaa tgtaatttaa accctggcaa        60
acattcttta gaaaccaaga ggaaagaaag aacaaatatc aaaaaagaca tagaatttaa       120
tattgataca atttcacctc taaaatggat ttgaagaaat gcaactttat atcaaaaaat       180
gtcatctgat ttcctttgtt tcttttttaa attatgtaat cagatgattt tatgtttttt       240
tttcaggga gcggaatatt ggtttctttt acttgttgtt ttcagttttc tctgccattc       300
atgtttcttt tttgtgttca gtgtttcaaa tacaatttgt atttaaggat tttaaaatac       360
caaactgtaa ctgagtacag tggatcgttt tctgttagga tgttaatatt atacaatgaa       420
atctataaag tgttgtcaat ttgattattg acacatataa catgtttaca aataaactgt       480
ggtattgatc aaaaaaaaaa aaaaaaancc cggggggggc cccggaaccc aatccc          536
```

<210> 690
<211> 397
<212> DNA
<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (322)..(322)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (394)..(394)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (397)..(397)
<223> n equals a,t,g, or c

<400> 690
gtttgcgagc ggctggaacc agacggtgcc gatagaggaa gcgggctcca tggctgccct      60
cctgctgctg cccctgctgc tgttgctacc gctgctgctg ctgaagctac acctctggcc     120
gcagttgcgc tggcttccgg cggacttggc ctttgcggtg cgagctctgt gctgcaaaag     180
ggctcttcga gctcgcgccc tggccgcggc tgccgccgac ccggaaggtc ccgaggggggg    240
ctgcagcctg gcctggcgcc tcgcggaact ggcccagcag cgcgcggaac ttttattacg     300
gtcgcgcgct ttagctactc anaggcggag cgcgagagta acaggctgac gcgccttcct     360
acgtgcgcta ggctgggact ggggacccga cggnggn                             397

<210> 691
<211> 716
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (630)..(630)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (710)..(710)
<223> n equals a,t,g, or c

<400> 691
gcctcagcgg ccgggcccac ggccccgagc agccatgctg ggcgcgcggg cctgttggg      60
ccgcgtcctt ctgctgcccc gcgccggtgc aggcctcgcc gcragccgca ggtgtcctgg     120
agtctggccc aggacctggc cccacaggag tcccagcagg ggtagctcct cccgggacaa     180
ggaccgaagt gcgacggtca gtagttcagt gcccatgcct gctggaggga aaggaagcca     240
tccttcatct acaccccaga gggtccccaa ccgcctgatc cacgagaagt caccatacct     300
cctacaacat gcctacaatc ctgtggactg gtacccctgg ggacaggaag ccttcgacaa     360
ggccaggaag gaaaacaagc cgattttcct ctcagtcggg tactccacct gccactggtg     420
ccacatgatg gaagaggagt ccttccagaa tgaggagatt ggccgcctg tcagtgagga     480
ctttgtgagt gtgaaggtag accgtgagga gcggcctgac gtggacaagg tgtacatgac     540
gttcgtgcag gccaccagca gcggcggggg ctggcccatg aatgtgtggc tgactcccaa     600
cctccagccc tttgtcgggg gcactatttn cctcctgaag gatggcttga mccgagtsgg     660
ttccgcacag tgttkctgag aatacgagaa cartggaaac agaacaagan caccct          716

<210> 692
<211> 2716
<212> DNA
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<213> Homo sapiens

<400> 692
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cttccaggct gaactccctg aggtctctga ttccctaggt gtcctggagt ctggcccagg       180
acctggcccc acaggagtcc cagcaggggt agctcctccc gggacaagga ccgaagtgcg       240
acggtcagta gttcagtgcc catgcctgct ggagggaaag gaagccatcc ttcatctaca       300
ccccagaggk tccccaaccg cctgatccac gagaagtcac catacctcct acaacatgcc       360
tacaatcctg tggactggta cccctgggga saggaagcct tygacaaggc caggaaggaa       420
aacaagccga ttttcctctc agtcgggtac tccacctgcc actggtgcca catgatggaa       480
gaggagtcct tccagaatga ggagattggc cgcctgctca gbaggactt tgtgagtgtg       540
aaggtagacc gtgaggagcg gcctgacgtg gacaaggtgt acatgacgtt cgtgcaggcc       600
accagcagcg gcggggggctg gcccatgaat gtgtggctga ctcccaacct ccagcccttt       660
gtcgggggca cctatttccc tcctgaggat ggcttgaccc gagtcggctt ccgcacagtg       720
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cgtgtcacca ctgccctgct ggcccgatca gagatcagcg tgggtgaccg ccagctgccg       840
ccctctgccg ccaccgtgaa caatcgctgc ttccagcagc tggatgaggg ctatgatgag       900
gaatacggtg gcttcgctga ggcccccaag tttcccægc cggtgatcct gagcttcctg       960
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caccgctact ccacagaccg ccagtggcac gtccctcact ttgagaagat gctctatgac      1140
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tctgacgtgg ccaaaggcat cctgcagtac gtggctcgga gcctgagcca ccggtccgga      1260
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accgtccggt actcgctgga gctgactgct gcccgctttg gcttggatgt ggaggccgtg      1560
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gagtgggctc tgcggctgca ggacacacag gacaggctct tttgggactc ccagggtgc      1980
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gaccaggcca ctgcatatgt gtgtgagaat caagcctgct cagtgcccat cactgatccc      2460
tgcgaattac gaaaactact acatccatga ctgccccaac ccccttgggg tggggcagaa      2520
ggtgaagcat cccaactgac tagagactca ggccctgcag ggccctatag aacctgtggc      2580
catccctgag caccctgcca ccaggtgacc tcggccatac tcactgcccc ccttgggcac      2640
ccactcaccc tagaataaac ttaacagtgt cccgtggtaa aaaaaaaaa aaaaaaaaa       2700
aaaaagggc ggccgc                                                      2716
```

<210> 693
<211> 427
<212> DNA
<213> Homo sapiens

<400> 693
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ccacgcgtcc ggtgggctca ctgttgggct ccagcctagt ggcactgctg tccttgcccg        60
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ggggctggct gcactgcccc aaggactttg ggaacatcaa caattgccgg atggacctct    120
acttcttcct gctggctggc attcaggccg tcacggctct cctatttgtc tggatcgctg    180
gacgctatga gaggcgtcc cagggcccag cctcccacag ccgtttcagc agggacaggg    240
gctgaacagg ccctattcca gccccctttgc ttcactctac cggacagacg gcagcagtcc    300
cagctctggt ttccttctcg gtttattctg ttagaatgaa atggttccca taaataaggg    360
gcatgagccc ttcctcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa aaaaaaaaaa    420
aaaaaaa                                                             427
```

<210> 694
<211> 1257
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (549)..(549)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (589)..(589)
<223> n equals a,t,g, or c

<400> 694
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gttttcagca ggattttcct ttcagtgaaa cataatttga cttgaaagga acccagggaa    60
aagtgtccag gtgtgagcat gagcgggtag aggtgtgccc ttgtttgctt caggctgtct    120
gcttttcgcc cctgactgtt ttttctgttt ctggccatgg aggaagagaa agatgacagc    180
ccacaggctg acttctgcct gggcaccgcc ctgcactctt ggggactgtg gttmacggag    240
gaaggttmac cgtccaccat gctgacgggg attgcagttg gagccctcct ggccctggcc    300
ttggttggtg tcctcatcct tttcatgttc agaaggctta gacaatttcg acaagcacag    360
cccactcctc agtaccggtt ccggaagaga gacaaagtga tgttttacgg ccggaagatc    420
atgaggaagg tgaccacact ccccaacacc cttgtggaga acactgccct gccccggcag    480
cgggccagga agaggaccaa ggtgctgtct ttggccaaga ggattctgcg tttcaagaag    540
gaatacccng gcctgcascc caaggacccc cggcttccc tgctggagnc cgacttcacg    600
gagtttgacg tgaagaattc tcacctgcca tcggaagttc tgtacatgct gaaaaacgtt    660
cgggtcctgg gccactttga gaagccgctg ttcctggagc tttgcaaaca catcgtcttt    720
gtgcagctgc aggaaggggga gcacgtcttc cagcccaggg agccggaccc cagcatctgt    708
gtggtgcagg acgggcggct ggaggtctgc atccaggaca ctgacggcac cgaggtggtg    840
gtgaaagagg ttctggcggg agacagcgtc cacagcctgc tcagcatcct ggacatcatc    900
accggccatg ctgcacctta caaaacggtc tccgtccrcg cggccatccc gtccaccatc    960
ctccggcttc cagctgcggc ttttcatgga gtttttgaga aatatccgga aactctggtg   1020
agggtggtgc agatcatcat ggtgcggctg cagagggtga cctttctggc tctgcacaac   1080
tacctcggcc tgaccacaga gctcttcaac gctgagagcc aggccatccc tctcgtgtct   1140
gtagccagtg tggctgccgg gaaggccaag aagcaggtgt tctatggcga agaagagcgg   1200
cttaaaaagc caccgcggct ccaggagtcc tgtgactcag atcacggggg cggccgc      1257
```

<210> 695
<211> 3302
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3274)..(3274)
<223> n equals a,t,g, or c

<400> 695

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ggccctggag.tccacgcgga ttttcgaagc tggggctggc aagaggccgc tggacaccac   120
gctccagtcg tcagcccact tcctagctga acagcgcgag gcggcggcag cgagccgggt   180
cccaccatgg ccgcgaatta ttccagtacc agtacccgga gagaacatgt caagttaaa    240
accagctccc agccaggctt cctggaacgg ctgagcgaga cctcgggtgg gatgtttgtg   300
gggctcatgg ccttcctgct ctccttctac ctaattttca ccaatgaggg ccgcgcattg   360
aagacggcaa cctcattggc tgaggggctc tcgcttgtgg tgtctcccga cagcatccac   420
agtgtggctc cggagaatga aggaaggctg gtgcacatca ttggcgcctt acggacatcc   480
aagcttttgt ctgatccaaa ctatggggtc catcttccgg ctgtgaaact gcggaggcac   540
gtggagatgt accaatgggt agaaactgag gagtccaggg agtacaccga ggatgggcag   600
gtgaagaagg agacgaggta ttcctacaac actgaatgga ggtcagaat catcaacagc   660
aaaaacttcg accgagagat tggccacaaa aaccccagtg ccatggcagt ggagtcattc   720
ayggcaacag ccccctttgt ccaaattggc aggttttttcc tctcgtcagg cctcatcgac   780
aaagtcgaca acttcaagtc cctgagccta tccaagctgg aggaccctca tgtggacatc   840
attcgccgtg gagactttt ctaccacagc gaaaatccca agtatccaga gktgggagac   900
ttgcgtgtct ccttttccta tgctggactg agcggcgatg accctgacct gggcccagct   960
cacgtggtca ctgtgattgc ccggcagcgg ggtgaccagc tagtcccatt ctccaccaag  1020
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attgccggcc tggcccttgt gcccatcctt gttgctcgga cacgggtgcc agccaaaaag  1380
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cacyccctct cctcttcagg ggccagactt ggcagcatgt gcaccaggtt ggtgttcacc  1560
agctcatgtc ttccccacat ctcttcttgc cagtaagcag ctttggtggg cagcagcagc  1620
tcatgaatgg caagctgaca gcttctcctg ctgtttcctt cctctcttgg actgagtggg  1680
tacggccagc cactcagccc attggcagct gacaacgcag acacgctcta cggaggcctg  1740
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tttgccacca ccaccaagca catctgtgat cctgaagggc ggccgttagt cattactgct  1860
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acacaagtct gtggctagaa cctgatgtgg tgtttaaaag agaagaaaca ctgaagatgt  1980
cctgaggaga aaagtcgac atatactggg cttcacactt atcttatggc ttggcagaat  2040
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aaaaaaaaca cttaatattt cagactgtta caggaaacac cctttagtct gtcagttgaa  2220
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tgaaaccaga gatctgtaat catctctatt ggcctggggt gcctgtgcta taatgagtt   2940
tcttcacatg aaaaacacag ccagcccaag atgacttatc tgggtttagg attcaatagt  3000
attcactaac tgcttattac atgagcaatt tcatcaaatc tccaaactct taaaggatgc  3060
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taatgttaag aaaaatttga aagctttgga aaaccaaatt tgtaatatca ttgtattttt  3240
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aa                                                                 3302
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457

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<210> 696
<211> 959
<212> DNA
<213> Homo sapiens

<400> 696
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caaaatgaag cttctccttt gggcctgcat tgtatgtgtt gcttttgcaa ggaagagacg     120
gttccccttc attggtgagg atgacaatga cgatggtcac ccacttcatc catctctgaa     180
tattccttat ggcatacgga atttaccacc tcctctttat tatcgcccag tgaatacagt     240
ccccagttac cctgggaata cttacactga cacagggtta ccttcgtatc cctggattct     300
aacttctcct ggattcccct atgtctatca catccgtggt tttccctag ctactcagtt      360
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tcagtgaaat tctctagaag agtaccatgg gttcatttct aactgatgc agaaataagt      780
gaaatctaca aaagttttct ttcttttcca aagactattt cattctgttg tattcagagt     840
attcatctca ctacattgat ttgtttgtgg tagttttttcc ttggacttaa tttatattga     900
aaaaacattg ataattaaat aaataaaata gataatttag accaaaaaaa aaaaaaaaa      959


<210> 697
<211> 2227
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)..(289)
<223> n equals a,t,g, or c

<400> 697
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cgtaggctca gatcttcatt tgaggttatg ttctataagt taacgttgat cttgtgtgag     180
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cacatctgca gccagcgtaa tcctcctggg agatgcctcc tcaaggccnt gctccagacc     300
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aacgctagac agatggggaa tgggaaagaa aagaaagctg cagacctcaa gttaaaattc     420
cctcaaaaac gtttttattt atctgctttt tctgaaggga taaaggcttt ttgaaaatta     480
ttttctaaca aataacatga acacttctag aaccctaga aaaacacaaa gtattcaaaa      540
tagaaagaaa aattacccat tactctttaa gccagcatta tccattgcgg tgcttttgga     600
gttgggtgag gccgtagcct ctgccaagtc aaggagcccg gtggtggctg tggcattcct     660
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agacccttgc tccatcaccc aggccagagt gtggtsgtgc gaacacggct cactgcagcc     960
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tarccatscc tgtttcaaga gtgtaggtgg tcaccctgtc tctgycgctg acctggctg     1140
gaccctcggc tgtgagaggg aggggtgggc tgggctggag gaacctraag ccctcgtgat    1200
gtcacaagcc catctggctg ggcatcccct gctgtgtcct gagctgcaca tgccccaggt    1260
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ggragaagaa gggcccaggc cccaggaga ctcaggagac cagagcctgg ggtcaggggc    1380
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gttcttcgca ctcccaccgt ccgtgtgaac agctccagcc ccacctgcgc ctccctgtgc    1500
tgggctccat cagggagccc agaagacgtg tgtgcttctg aaattgggtc ctacatgcc     1560
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cccagaggtt gacggatata ttcagacgtt acgacacgga tcaggacggc tggattcagg    1680
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catatgtgga taagctgatt aatggttttg caactgtaat agtagctgta tcgttctaat    1920
gcagacattg gatttggtga ctgtctcatt gtgccatgag gtaaatgaa tgtttcaggc     1980
attctgcttg caaaaaaatc tatcatgtgc ttttctagat gtctctggyt ctatagtgca    2040
aatgctttta ttagccaata ggaattttaa aataacatgg aacttacaca aaaggctttt    2100
catgtgcctt acttttttaa aaaggagttt attgtattca ttggaatatg tgacgtaagc    2160
aataaaggga atgttagacg tgtaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    2220
aaaaaaa                                                              2227


<210> 698
<211> 2214
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)..(289)
<223> n equals a,t,g, or c

<400> 698
cggacgcgtg ggtcgaccca cgcgtccggg aaaaarggaa aaratgccgt gtaaaatctc      60
gttctgtgtc tgaattgccg taggctcaga tcttcatttg aggttctgtg tctgaattgc     120
cgtaggctca gatcttcatt tgaggttatg ttctataagt taacgttgat cttgtgtgag     180
ctttcggtag ctggagtaac acaggcggcc tcacagcgac ctctccagcg ccttccaagg     240
cacatctgca gccagcgtam tcctcctggg agatgcctcc tcaaggccnt gctccagacc     300
acgtgggrar ggcctgacaa gccaattccc aggctgtccc cacccttgra gagtgaccct     360
aaacgctaga cagatgggga atgggaaaga aaagaaagt gcagacctca agttaaaatt      420
ccctcaaaaa cgtttttatt tatctgcttt ttctgaaagg ataaaggctt tttgaaaatt     480
attttctaac aaataacatg aacacttcta gaaaccctag aaaaacacaa agtattcaaa     540
atagaaagaa aaattaccca ttactcttta agccagcatt atccattgcg gtgcttttgg     600
agttgggtga ggccgtagcc tctgccaagt caaggagccc ggtggtggct gtggcattcc     660
tgcagggttg tttttttttc tttgagatgg agtctcactc ttgtcacccc agctggaatg     720
tggtggtgta aacagctcac tgcagccttg accctgaggc tcaagcgatc cttctgcctt     780
ggcctcctga gtagctggga tcccaggcga gatcaccac accctgtcca tgttcctgca      840
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cagacccttg ctccatccac caggccagag tgtggtsgtg cgaacacggc tcactgcagc     960
ctcgaccctc aggctcaagc gatcctcacg cctcggaccc ccaaagtgct gggatcacag    1020
gcgagagtca ccatgctggc ctgaatcttc agggtatttr cggttgargt gycacttact    1080
tarccatscc tgtttcaaga gtgtaggtgg tcaccctgtc tctgccgctg acctggcctg    1140
gaccctcggc tgtgagaggg aggggtgggc tgggctggag gaacctraag ccctcgtgat    1200
gtcacaagcc catctggctg ggcatcccct gctgtgtcct gagctgcaca tgccccaggt    1260
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tmagcagggg ctyarccagg gctggatgtc cggagccagc cccgmagccc tgkgktctt     1440
gttcttcgca ctcccaccgt ccgtgtgaac agctccagcc ccacctgcgc ctccctgtgc    1500
tgggctccat cagggagccc agaagacgtg tgtgcttctg aaattgggtc cctacatgcc    1560
tttgtcccag tgcaccttgc tccttccatt tactatcgag atttaaatgc ctgttttctc    1620
cccagaggtt gacggatata ttcagacgtt acgacacgga tcaggacggc tggattcagg    1680
tgtcgtacga acagtacctg tccatggtct tcagtatcgt atgaccctgg cctctcgtga    1740
agagcagcac aacatggaaa gagccaaaat gtcacagttc ctatctgtga gggaatggag    1800
```

459

```
cacaggtgca gttagatgct gttcttcctt tagattttgt cacgtgggga ccagctgta    1860
catatgtgga taagctgatt aatggttttg caactgtaat agtagctgta tcgttctaat    1920
gcagacattg gatttggtga ctgtctcatt gtgccatgag gtaaatgtaa tgtttcaggc    1980
attctgcttg caaaaaaatc tatcatgtgc ttttctagat gtctctggtt ctatagtgca    2040
aatgctttta ttagccaata ggaattttaa aataacatgg aacttacaca aaaggctttt    2100
catgtgcctt acttttttaa aaaggagttt attgtattca ttggaatatg tgacgtaagc    2160
aataaaggga atgttagacg tgtaaaaaaa aaaaaaaaa aaaaaaaaa aaag            2214
```

<210> 699
<211> 1005
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1004)..(1004)
<223> n equals a,t,g, or c

<400> 699
```
atgggaaatg ctcttttgaa ggtacgcccg caggtcccgg tccggaattc ccgggtcgac    60
ccacgcgtcc ggccagaagc agccatgaag tgagcctgca ggcaggccag cctgtgacca    120
tcctggaggc ccaggacaag aaggggaacc ctgagtggag cctggtggaa gtgaatggac    180
agagggggtta tgtgccttct ggcttcttgg ccagggctcg gagcccagtt ctgtggggct    240
ggagtctgcc ctcttagggt accctctttg gagcctacat gccaaatga tggggggaggc    300
ttagaggctc tgaccctggg gggaaaagaa gcaaaggaaa gtggaggtg aagggaaga    360
ccaggccagg gtgggtgaag cacactcagg aggcagccag aagacatggg cgggcctcgc    420
agagtgcttg gtgtggtggg ggcacaggag gctccagcca ggactgctca ttatgtctgc    480
ataaagaact cattccgacc tggggtcaca atgcacttgg acagcaggtc acagctgatt    540
ggccaggact ctcgataggt tatggccagt cttagctgtg cctgcatccg ggcctgcctg    600
tgggcgtggg tcacacggga taatgttacc tgcgtgctgt gtggttgcag gaagcgggtt    660
ctggaggagt ccagaactgc ctggtcagac agttcacttc ctacacatgg tatcaggaga    720
catcataacc aatgagtcag cttttatttc tctatgtgg aagctgagtt tatcttgggc    780
agtgacccac tgggagccct ctcaagtggg gaagccatgg atttatcggt gtagcagaga    840
ggttcccaag actcttgact ggtcctggga gtgggtgtga ccaagtcata gttctggaat    900
gtgtgtaggc aaattcagag gctgttccag ggaagagggg attttgatac tgtgttaggt    960
ggggtgtgtg aggctgytgg cagcaggtga acagctactg ctgng               1005
```

<210> 700
<211> 2988
<212> DNA
<213> Homo sapiens

<400> 700
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cccacgcgtc cggccagaag cagccatgaa gtgagcctgc aggcaggcca gcctgtgacc    60
atcctggagg cccaggacaa gaaggggaac cctgagtgga gcctggtgga agtgaatgga    120
cagagggggtt atgtgccttc tggcttcttg gccagggctc ggagcccagt tctgtggggc    180
tggagtctgc cctcttaggg taccctcttt ggagcctaca ttgccaaatg atgggggagg    240
cttagaggct ctgaccctgg ggggaaaaga agcaaaggaa aggtggaggt ggaagggaag    300
accaggccag ggtgggtgaa gcacactcag gaggcagcca gaagacatgg gcgggcctcg    360
cagagtgctt ggtgtggtgg gggcacagga ggctccagcc aggactgctc attatgtctg    420
cataaagaac tcattccgac ctggggtcac aatgcacttg gacagcaggt cacagctgat    480
tggccaggac tctcgatagg ttatggccag tcttagctgt gcctgcatcc gggcctgcct    540
gtgggcgtgg gtcacacggg ataatgttac ctgcgtgctg tgtggttgca ggaagcgggt    600
tctggaggag tccagaactg cctggtcaga cagttcactt cctacacatg gtatcaggag    660
acatcataac caatgagtca gcttttattt ctctatgctg aagctgagtt ttatcttggg    720
cagtgaccca ctgggagccc tctcaagtgg ggaagccatg gatttatcgg tgtagcagag    780
aggttcccaa gactcttgac tggtcctggg agtgggtgtg accaagtcat agttctggaa    840
```

460

```
tgtgtgtagg caaattcaga ggctgttcca gggaagaggg gattttgata ctgtgttagg      900
tggggtgtgt gaggctgttg gcagcaggtg aacagctact gctgtgttct caggactagg      960
gaacaaaggg gtatgcaaat catagaggaa actctgggaa ggcggtgata aggcctggtg     1020
ggtgggggagg ttagggaatg gcttgctttc ctgtttctgg ttagaagggg agccaggggg    1080
aacccccagt ggtttcaggt ggcccctgag gtcctggagg cagccgtgga tgtgagcaa      1140
ttggctgtgg gaccttagat gtaggacaca acttcagtgt tcccatccag aaagacctca     1200
ctcacagggt tgtgctgaga atgacatggg gctaagcatg cagagctccc tgtaaactgt     1260
gaagtgtgat acaaatgtaa atgacagcag tgatctcggg gtggcccccg gcatgctgcc     1320
ctccCccacg cccatgcctg tggcagcaaa ccttgttcat cagtatagct ttctttcctg     1380
taacccagga tctaccttgg ggggcttctc aatactgcat tctatgtagc cagcctcttt     1440
aacttggtaa gtgagccacc ccattctaga acctggaaat tggagccccct caaaaacagt    1500
tcctgttcaa ggaggactga cctgctgggg caatgttggg tgcagtgcagtccctgcttg      1560
gggtggtcat gtctaggctg ttgctctggg caaagataag ttgcaagatt cacagaaatg     1620
ggaaaatgtg accaagtgtg atcttaacaa ctgacaaagt ttgtaaccaa cccaagttag      1680
aatgtgtgtc aaacaggagg tagtttagat atgcttccaa gaacatgtct gtgttataac     1740
catagtgcct aagcagtgag ctctggtttt tgaagggctt ttaagaaata tatacatgtc      1800
tgtgtcagtc tataacttgc ctcctctggg cctgttaaag catgaagact gcatgacaca     1860
agagaaatgc aagccctacg gttcctttct cagcagcgaa ttcacttgag aggatgctct     1920
tgactcattc tctctgctct ttcctgctca gatttctgat aaaatagag agcataggggg      1980
aacagataat gaaataggaa acccactcgt gggttccaca gatacctacc gaaggcctac     2040
tgtgtgctag aattgtagct caggagttct cagtgtagct gctcactgaa gttaccatgg     2100
caggtttcaa ctggcagaat ccaggctccg tcccacccag agattctgat gaaattggtt     2160
tagggtgtgg ctcgggcctc aggaattcag aaagcttccc aggtgcttcc aatgtgcagc     2220
cagggttagg gacctctacc ctagacacaa agtattggac agatagacct ggtgccagag     2280
atggccaaga gctgtaagct aggacgtgcc ccacctgagc tctgcactag ctagttcaaa     2340
caggcgcttt aaaggcagtg tgaaagggga cagcctgttc tgccaggtct cagaatgtat     2400
atttattaag tgccattaaa agggacctga acaaaattgg atgtcttgta ggcataaggg     2460
aggaaaataa aatatacttg gaaccaagtc tatgtcatga agggaaaata aaaatgtatt     2520
cagtagcacg tgggttatgg tttctcatag accaggggat aagattaaaa gtcactgaag     2580
agtgggaaaa tgcatgttga gaagatgaga atggcctgta ttttctccag gggaatctgt     2640
gtaatgtgcc ttttcccctct ccaaatgcct agaaccatgg cactgtgtct tatttattta     2700
accgttgggc tgtctcatac taaacttgca aagatatttg cctatgaact gaacaagact     2760
tccaggagtt gaagtctggt tcacaagggt accettgcc tcctgtgatg gagtgagaac      2820
tcttaaaccc ctcaggcccc aactcagttg tggagatgag gacaagatta caatatcaaa     2880
agaaagatga atgaattctt ggttaatatg acgaaccccca gctcaatgag taactgatgt     2940
gaactgctgg gaataaagga cttcaaagat ggaaaaaaaa aaaaaaaa                   2998
```

<210> 701
<211> 2052
<212> DNA
<213> Homo sapiens

<400> 701
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ttttttttttt tccatctttg aagtcctttA ttcccagcag ttcacatcag ttactcattg      60
agctgggggtt cgtcatatta accaagaatt cattcatctt tcttttgata ttgtaatctt     120
gtcctcatct ccacaactga gttgggggcct gagggggttta agagttctca ctccatcaca    180
ggaggcaagg ggtacccttg tgaaccagac ttcaactcct ggaagtcttg ttcagttcat      240
aggcaaatat ctttgcaagt ttagtatgag acagcccaac ggttaaataa ataagacaca     300
gtgccatggt tctaggcatt tggagaggga aaaggcacat tacacagatt cccctggaga     360
aaatacaggc cattctcatc ttctcaacat gcattttccc actcttcagt gacttttaat      420
cttatcccct ggtctatgag aaaccataac ccacgtgcta ctgaatacat ttttattttc     480
ccttcatgac atagacttgg ttccaagtat attttatttt cctcccttat gcctacaaga     540
catccaattt tgttcaggtc ccttttaatg gcacttaata aatatacatt ctgagacctg      600
gcagaacagg ctgtcccctt tcacactgcc tttaaagcgc ctgtttgaac tagctagtgc     660
agagctcagg tggggcacgt cctagcttac agctcwtggc catctctggc accaggtcta      720
tctgtccaat actttgtgtc tagggtagag gtccctaacc ctggctgcac attggaacga     780
cctgggaagc tttctgaatt cctgaggccc gagccacacc ctaaaccaat ttcatcagaa      840
```

```
tctctgggtg ggacggagcc tggattctgc cagttgaaac ctgccatggt aacttcagtg    900
agcagctaca ctgagaactc ctgagctaca attctagcac acagtaggcc ttcggtaggt    960
atctgtggaa cccacgagtg ggtttcctat ttcattatct gttcccctat gctctctatt   1020
ttkatcagaa atctgagcar gaaagagcag agagaatgag tcaagagcat cctctcaagt   1080
gaattcgctg ctgagaaagg aaccgtaggg cttgcatttc tcttgtgtca tgcagtcttc   1140
atgctttaac aggcccagag gaggcaagtt atagactgac acagacatgt aatatttct   1200
taaaagccct tcaaaaacca gagctcactg cttaggcact atggttataa cacagacatg   1260
ttcttggaag catatctaaa ctacctcctg tttgacacac attctaactt gggttggtta   1320
caaactttgt cagttgttaa gatcacactt ggtcacattt tcccatttct gtgaatcttg   1380
caacttatct ttgcccagag caacagccta gacatgacca ccccaagcag ggactgcact   1440
gcacccaaca ttgccccagc aggtcagtcc tccttgaaca ggaactgttt ttgaggggct   1500
ccaatttcca ggttctagaa tggggtggct cacttaccaa gttaaagagg ctggctacat   1560
agaatgcagt attgagaagc cccccaaggt agatcctggg ttacaggaa gaaagctata   1620
ctgatgaaca aggtttgctg ccacaggcat gggcgtgggg gagggcagca tgccgggggc   1680
cacccccgaga tcactgctgt catttacatt tgtatcacac ttcacagttt acagggagct   1740
ctgcatgctt agccccatgt cattctcagc acaaccctgt gagtgaggtc tttctggatg   1800
ggaacactga agttgtgtcc tacatctaag gtcccacagc caattgcatc acatccacgg   1860
ctgcctccag gacctcaggg gccacctgaa accactgggg gttcccctg gctcccttc    1920
taaccagaaa caggaaagca agccattccc taacctcccc acccaccagg ccttatcacc   1980
gccttcccag agtttcctct atgatttgca taccccttg tccctagtc ctgagaacac   2040
agcagagctt tc                                                        2052
```

<210> 702
<211> 628
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (137)..(137)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (450)..(450)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (465)..(465)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (488)..(488)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (585)..(585)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (619)..(619)
<223> n equals a,t,g, or c

<400> 702
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gcacctcagg ccctccaagc gcaggatgca ggccgtggcc aacgtgtcca ttggggccat      60
gttctgcatg tatgggctca cagcaacctt tggatacctc accttctaca gtragtggg      120
ctggggctag ggctggnggg agggggaagg cctggggcag gagcctctga gctctttcct      180
tctgtgacca cggacctgtc agtttccaaa cagaargtgt gcctcacttg tgtggatttt      240
gtcactgtgc atgtatgtat gggtttctgg ggcattggtc ctggtgctct ctccacatcc      300
tgcatcccgt accctctgtc tcatggscca rgcartgtga aggcggagat gctgcacatg      360
tacagccaga aggacccgct catcctctgt gtgcgcctgg ccgtgctgct cgcggtgacc      420
ctcactgtgc cagtcgtgct gttccctatn cgccgggccc tgcancagct gcttttccca      480
ggcaaggnct tcagctggcc acgacatgtg gccataagct ctgatctgct tgtttggtca      540
atgtccttgt catctgtgtg ccaacatccg ggatatcttt ggganttaat cgggtcaact      600
caagccccag ctcatcttna tctcccag                                          628
```

<210> 703
<211> 923
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<400> 703
```
gggaacggna aactcgtttg ggttkggcca wgctgcmcat gtacagccag aaggacccgc      60
tcatcctctg tgtgcgcctg kycgtgctgc tcgcggtgac cctcactgtg ccagtcgtgc      120
tgttccctat ccgccgggcc ctgcagcagc tgcttttccc aggcaaggcc tcagctggc       180
cacgacatgt ggccatagct ctgatcctgc ttgtttttggt caatgtcctt gtcatctgtg      240
tgccaaccat ccgggatatc tttggagtta tcgggtccac ctcagccccc agcctcatct      300
tcatcctccc cagcatcttc tacctccgca ttgtaccctc tgaggtggag cctttcttat      360
cctggcccaa gatccaggcc ctgtgctttg gagtcctggg agtcctcttc atggccgtca      420
gtctaggctt tatgtttgcc aactgggcca caggccagag ccgcatgtct ggacactgat      480
caggccctgc tggcccaggt ccctgtgcgc atgcacatgg aggggtcagg gccgctccct      540
agggtccctc ctgcccaaca tgtggaggtg gctggttccc atgaagtgg ttgtcagagg       600
cgggggacag cagaggctgc agactggccc acttccctcc tccccaggga tgccaagctt      660
ggatcatggc cctaatccca accccaaccc catgggagga ggaggaggag gaagagagga      720
ggaggaggag gaggaggagg aggaggagga ggaggccagg tcctggtgga gcctttgccc      780
agcccagtcc tctctgcctc ctcctggctg aagctgtttg tcaggattac cctcgggcta      840
aagaggaaaa ataaagatgt tgagctacca aaaaaaaaa aaaaaaaaa aaaaaaaaa         900
aaaaaaaaa aaaagggcg gcc                                                923
```

<210> 704
<211> 1159
<212> DNA
<213> Homo sapiens

<400> 704
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ggaattttgt tgttctctgt ctctttgatt tcctggaaga cgacaccatg acaatttcaa      60
agaaaataga acaaaatgaa ggaaaaagag gctctgtctt agcacattcc tgtgaccagc      120
ctgctgtctg tggtgtgccc tcctggcccg gccttggcac atgttcgttt ttgtggttgt      180
tgcctggaca ggcaactctg cagggctgct tctctacgca tccctttgcc tgcctgcctg      240
tgccaggggt tgtcaagggc ttttgggtca gagtgggcac ccctttctcc aaggctccct      300
gcaacagctg gcctgtccct ggtggggctg acagcttcct tctcaccctg ccaggctgcc      360
caagcgccag aggtgaccta tgaggcagaa gagggctcct tgtggacgtt gctactcact      420
agcttggatg ggcacctgct ggagccagat gctgagtacc tccactggct gctaaccaac      480
atcccgggta accgggtggc tgaaggacag gtgacgtgtc cctacctccc cccttccct       540
gcccgaggct ccggcatcca ccgtcttgcc ttcctgctct tcaagcagga ccagccgatt      600
```

```
gacttctctg aggacgcacg cccctcaccc tgctatcagc tggcccagcg gaccttccgc    660
acttttgatt tctacaagaa acaccaagaa accatgactc cagccggctt gtccttcttc    720
cagtgccgct gggatgactc cgtcacctac atcttccacc agcttctgga catgcgggag    780
ccggtgtttg agttcgtgcg gccgcccccct tacacccca agcagaagcg cttcccccac    840
cggcagcccc tgcgctacct ggaccggtac agggacagtc atgagcccac ctatggcatc    900
tactaaggag ccagagtgtg cgcatttcag agcatgggat tgatcggcag caagagtaaa    960
gacacagctc cagaggccca cactgtgggg tctgggccct gccttaggca gccccctct   1002
ttggccccct cccgtcaggc ccagggcttg gagtgaaagt gactctcagg tggtgggggtg   1080
gggaatgtga ataaacatga tttcttgccg ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1140
aaaaaaaaaa aaaaaaaaa                                               1159


<210> 705
<211> 912
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (275)..(275)
<223> n equals a,t,g, or c

<400> 705
ccgggtcgac ccacgcgtcc gacagcagag atctgtggag taggattgtg ggctggcagt     60
gggtttatcc cacagaccta agacagstac ttaatttgta tagacccttc ccagcctggg    120
cctctgggtt ttccttctgg gtggagatca tcttctgtag gaaatggaac tgcttcaagc    180
caagaagctt ttactttttac taggtctttt tgtgtcctgc tgktcaaata ttaggaagac    240
tgaaccctgt ttcggtcttg acagtattac gtttngtgat cccaaaaaaa agtgtttgag    300
taacctcaag tcatgctgaa agtgaatac agcttaaagt gggattctgc tggacctgac    360
tcaactttttc acctcaccgc ttggctccgt gcaggcagta tttgagtatg tggttccccc    420
tcaagtctgt aggagttgta ttgtcaataa agtccaaggc cagagtgctt gctttctagt    480
aagtagagag aattttttgaa attcaacgac aaacatttat taagcccta ttgtgtcaag    540
ggctcaaagc taagtgcttt gggtgattca gggtgattag ggataggatt ccatcttcaa    600
gaagcctccc atctaggaag aaaggtcgat aagcatagtt ttggacacat gggagagcat    660
ggctttctct gggcccagta attactttgg tatccagatc attagagaac ggaatgcctt    720
ctattgaact atgtaacagt cacaggttta gatcttctca agttattatt gcctttaatc    780
ttcatatgat ycctatcctg cagttaggaa atggaamccc taggatatag tgactgtgag    840
ctcagaaaat taggttggga gataagccag tagattgagg tggtagattc ttcaagatct    900
tgaaggggggg aa                                                     912


<210> 706
<211> 321
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)..(3)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (298)..(298)
<223> n equals a,t,g, or c

<400> 706
ccnaaaaaaa aaaaagaaag aaaactcatt ctatttttct ctttggagca gaggttgcaa     60
aactgtgatg cctaacaaaa acgttgtgta taaaagctcc aaaaccaagc attagcctaa    120
```

464

```
attggctata actgcaactt aaatcaaaaa ctatatccaa ctagatcttc gttgtggcta    180
tgcaactttt tgctttgtgg cctgaaggtt tttactgagg taacaacctcttatctcttg    240
tccttccctc aaccacaaaa gcaaacccg ggaattccgg accggtacct gcaggctncc    300
ttctatagtg tcacctaaat a                                             321


<210> 707
<211> 2342
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (66)..(66)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2332)..(2332)
<223> n equals a,t,g, or c

<400> 707
tccgggggct gctcctgcat catccaaccc ttccaaaccc ctacacgatg gctgtggctg     60
cacgantcac ggcagctacc acggtaaccc acatcacagc cttgaccct gacagcacgg    120
ggcagcaggt gtggcaggat ctacttcagg atggacagct ggactctccc actggtgatg    180
gggggtctga ctgggagatg gtgggaagag aggttgtccc tgtcttggga ccaggggtgg    240
gaggcctggt aataagtagg ccttgtttcc atgttaggga tccctatccc tggggctgaa    300
ggggctcctg tcctgaattc tcttgtgttt ctctcaggcc aaagcacccc tacgcagaaa    360
ggagtaggca ttgctggagc tgtgtgtgtt tccagcaagt tgcgacctcg aggccagtgc    420
cgcctggagt tttcactggc ttgggacatg cccaggatca tgtttggagc taaaggccaa    480
gtccactaca ggcggtatac aaggttcttt ggccaggtg gagatgcagc acctgccctc    540
agccactatg cactgtgccg atacgcagag tgggaagaga ggatctcagc ttggcagagc    600
ccggtattgg atgacagatc actgcctgcc tggtacaaat ctgcgctgtt caatgaacta    660
tacttcctgg ctgatggagg cacagtgtgg ctggaagttc ttgaggactc cctaccagag    720
gagctgggca gaaacatgtg tcacctccgc cccaccctac gggactacgg tcgatttggc    780
taccttgagg gccaggagta ccgcatgtac aacacatatg atgtccactt ttatgcttcc    840
tttgccctca tcatgctctg gcccaaactt gagctcagcc tacagtatga catggctctg    900
gccactctca gggaggacct gacacggcga cggtacctga tgagtggggt gatggcacct    960
gtgaaaagga ggaacgtcat cccccatgat attggggacc cagatgatga accatggctc   1020
cgcgtcaatg catatttaat ccatgatact gctgattgga aggacctgaa cctgaagtttt  1080
gtgctgcagg tttatcggga ctattacctc acgggtgatc aaaacttcct gaaggacatg   1140
tggcctgtgt gtctagctgt gatggaatct gaaatgaagt ttgacaagga ccatgatgga   1200
ctcattgaaa atggaggcta tgcagaccag acctatgatg gatgggtgac cacaggcccc   1260
agtgcttact gtggagggct gtggctggca gctgtggctg tgatggtcca gatggctgct   1320
ctgtgtgggg cacaggacat ccaggataag ttttcttcta tcctcagccg gggccaagaa   1380
gcctatgaga gactgctgtg gaatggccgc tattacaact atgacagcag ctctcggcct   1440
cagtctcgta gtgttatgtc tgaccagtgt gctggacagt ggttcctgaa ggcctgtggc   1500
taggagaagg agacactgag gtgtttccta cccaacatgt ggtccgtgct ctccaaatca   1560
tctttgagct gaacgtccag gcctttgcag gaggggccat ggggggctgtg aatgggatgc   1620
agccccatgg tgtccctgat aaatccagtg tgcagtctga tgaagtctgg gtgggtgtgg   1680
tctacgggct ggcagctacc atgatccaag agggcctgac ttgggagggc ttccagacag   1740
ctgaaggctg ctaccgtacc gtgtgggagc gcctgggtct ggccttccag accccagagg   1800
catactgcca gcagcgagtg ttccgctcac tggcctacat gcggccactg agcatatggg   1860
ccatgcagct agccctgcaa cagcagcagc acaaaaaggc ctcctggcca aaagtcaaac   1920
agggcacagg actaaggaca gggcctatgt ttggaccaaa ggaagccatg gaaacctga    1980
gcccagagtg agccgtctga actgtgggag ggaagtgcta acagcccagc ctccagcctg   2040
gcctttcctc cttcccctct gaacctcctg caaccctgag ccatcaggac aatcataccc   2100
cttcccttct ctccacccaa ttgtgccagt aaatgggggt tgagggtgac ctaggcagca   2160
```

465

```
ttagaatcac ttatttattt ctttcctcac ctgttccctg actgcgtgaa atgttcaggg    2220
aggtcagttg atttccccag gtacattcat ggtgtgacag acacatgggt acaaataaaa    2280
gacccagaaa gccaaaaaaa aaaaaaaaa aaaactcgag gggggcccg gnacccaatt    2340
cg                                                                    2342


<210> 708
<211> 717
<212> DNA
<213> Homo sapiens

<400> 708
ggcacgagct agctgccgcc acccgaacag cctgtcctgg tgccccggct ccctgccccg     60
cgcccagtca tgaccctgcg cccctcactc ctcccgctcc atctgctgct gctgctgctg    120
ctcagtgcgg cggtgtgccg ggctgaggct gggctcgaaa ccgaaagtcc cgtccggacc    180
ctccaagtgg agaccctggt ggagccccca gaaccatgtg ccgagcccgc tgcttttgga    240
gacacgcttc acatacacta cacgggaagc ttggtagatg gacgtattat tgacacctcc    300
ctgaccagag accctctggt tatagaactt ggccaaaagc aggtgatcc aggtctggag    360
cagagtcttc tcgacatgtg tgtgggagag aagcgaaggg caatcattcc ttctcacttg    420
gcctatggaa aacggggatt tccaccatct gtcccagcgg atgcagtggt gcagtatgac    480
gtggagctga ttgcactaat ccgagccaac tactggctaa agctggtgaa gggcattttg    540
cctctggtag ggatggccat ggtgccagcc ctcctgggcc tcattgggta tcacctatac    600
agaaaggcca atagacccaa agtctccaaa aagaagctca aggaagagaa acgaaacaag    660
agcaaaaaga ataataaat aataaatttt aaaaaaaaaa aaaaaaaaaa aaaaaa         717


<210> 709
<211> 713
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)..(27)
<223> n equals a,t,g, or c

<400> 709
ccgcgggaac gctgtcctgg ctgccgncac ccgaacagcc tgtcctggtg ccccggctcc     60
ctgccccgcg cccagtcatg accctgcgcc cctcactcct cccgctccat ctgctgctgc    120
tgctgctgct cagtgcggcg gtgtgccggg ctgaggctgg gctcgaaacc gaaagtcccg    180
tccggaccct ccaagtggag accctggtgg agcccccaga accatgtgcc gagcccgctg    240
cttttggaga cacgcttcac atacactaca cgggaagctt ggtagatgga cgtattattg    300
acacctccct gaccagagac cctctggtta tagaacttggccaaaagcag gtgattccag    360
gtctggagca gagtcttctc gacatgtgtg tgggagagaa gcgaagggca atcattcctt    420
ctcacttggc ctatggaaaa cggggatttc caccatctgt cccagcggat gcagtggtgc    480
agtatgacgt ggagctgatt gcactaatcc gagccaacta ctggctaaag ctggtgaagg    540
gcattttgcc tctggtaggg atggccatgg tgccaccctc ctgggcctca ttgggtatca    600
cctatacaga aaggccaata gacccaaagt ctccaaaaag aagctcaagg aagagaaacg    660
aaacaagagc aaaaagaaat aataaatat aaattttaaa aaacttaaaa aaa           713


<210> 710
<211> 1165
<212> DNA
<213> Homo sapiens

<400> 710
ggcacgagcc ggtatgtggc cccgtctggc tagtcccgcc tagcgcgccc atttcgagcc     60
caagtttcca gctcgggttt ccaggctcag aattttccag gagtaggttc ttgggcagtg    120
gctgtgggag ctggaatggc gcagctggaa ggttactatt tctcggccgc cttgagctgt    180
```

```
accttttttag tatcctgcct cctcttctcc gccttcagcc gggcgttgcg agagccctac   240
atggacgaga tcttccacct gcctcaggcg cagcgctact gtgagggcca tttctccctt   300
tcccagtggg atcccatgat tactacatta cctggcttgt acctggtgtc aattggagtg   360
atcaaacctg ccatttggat ctttggatgg tctgaacatg ttgtctgctc cattgggatg   420
ctcagatttg ttaatcttct cttcagtgtt ggcaacttct atttactata tttgcttttc   480
tgcaaggtac aacccagaaa caaggctgcc tcaagtatcc agagagtctt gtcaacatta   540
acactagcag tatttccaac actttatttt tttaacttcc tttattatac agaagcagga   600
tctatgtttt ttactctttt tgcgtatttg atgtgtcttt atggaaatca taaaacttca   660
gccttccttg gattttgtgg cttcatgttt cggcaaacaa atatcatctg ggctgtcttc   720
tgtgcaggaa atgtcattgc acaaaagtta acggaggctt ggaaaactga gctacaaaag   780
aaggaagaca gacttccacc tattaaagaa ccatttgcag aattcagaaa aattcttcag   840
tttcttttgg cttattccat gtcctttaaa aacttgagta tgcttttgct tctgacttgg   900
ccctacatcc ttctgggatt tctgttttgt gcttttgtag tagttaatgg tggaattgtt   960
attggcgatc ggagtagtca tgaagcctgt cttcattttc ctcaactatt ctactttttt  1020
tcatttactc tctttttttc ctttcctcat ctcctgtctc aacaaataaa taaataaaca  1080
taaatgcatg cattcataca tacaattgat aaatctaatc ttggccaaaa aaaacccaaa  1140
acaaataaa aaaaaaaaaa aaaaa                                         1165


<210> 711
<211> 1160
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (345)..(345)
<223> n equals a,t,g, or c

<400> 711
gccggtatgt ggcccygtct ggctagtccy gyctagcgcg cccatttcga gcccaagttt    60
ccagctcggg tttccrggct cagaattttc caggagtrgg ttcttgggca gtggcgtgg   120
gagcwggaat ggcgcagctr garggttact rtttctcggc cgccttgagc tgtacctttt   180
tagtrtcctg cctcctcttc tccgccttca gccgggcgyt gcgagagccc tacatggacg   240
agatcttcca cctgcctcag gcgcagcgct actgtgaggg ccatttctcc ctttcccagt   300
gggatcccat gattactaca ttacctggct tgtacctggt gtcanttgga gtgrtcaaac   360
ctgccatttg gatctttgga tggtctgaac atgttgtctg ctccattggg atgctcagat   420
ttgttaatct tctcttcagt gttggcaact tctatttact atatttgctt ttctgcaagt   480
acaacccaga aacaaggctg cctcaagtat ccagagagtc ttgtcaacattaacactagc   540
agtatttcca acactttatt tttttaactyccttttattat acagaagcag gatctatgtt   600
ttttacyctt tttgcgtatt tgatgtgtct ttatggaaat cataaaactt cagccttcct   660
tggattttgt ggcttcatgt ttcggcaaac aaatatcatc tgggctgtct tctgtgcagg   720
aaatgtcatt gcacaaaagt taacggaggc ttggaaaact gagctacaaa agaaggaaga   780
cagacttcca cctattaaag gaccatttgc agaattcaga aaaattcttc agtttctttt   840
ggcttattcc atgtccttta aaaacttgag tatgcttttg cttctgactt ggccctacat   900
ccttctggga tttctgtttt gtgcttttgt agtagttaat ggtggaattg ttattggcga   960
tcggagtagt catgaagcct gtcttcattt tcctcaacta ttctactttt tttcattttac  1020
tctcttttttt tcctttcctc atctcctgtc tcaacaaata aataaataaa cataaatgca  1080
tgcattcata catacaattg ataaatctaa tcttggccaa aaaaaaccca aaacaaaata  1140
aaaaaaaaaa aaaaaaactc                                              1160


<210> 712
<211> 979
<212> DNA
<213> Homo sapiens

<400> 712
ctcatgtggg gagatgagcg tctttctcct gggaccgaag agggaacaag acggagaagg    60
```

467

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aagaggcggg gctgcgactg tscccagcgt actgccgggc tgccggtcc ctgctctggg    120
tacttctctg ctttcgggcg tctcgtctag aagctgcagc ttggcctgtc tcacctctac    180
acagaggggc tgctggcgcc tgacggaaaa aggtccacac acccgatggc cggcccgggg    240
tggacgctgc tgctactgct gctgctgctg ctgctgctgg ggtccatggc agggtatggg    300
ccacagaaga agttgaacct gtcccataag ggcatcgggg agccatgcgg gagacacgag    360
gagtgccaga gcaactgctg taccatcaac agcctggccc cacacacgct ctgcacccct    420
aagaccatct tcctgcagtg cctgccctgg aggaagccca atgggtacag atgctcgcac    480
gactcagagt gccagagcag ctgctgcgtc cgcaacaacagcccgcagga gttgtgcacg    540
ccccaaagcg tcttcctgca gtgtgtgccc tggcgcaagc ccaacggcga cttctgcagc    600
agccatcarg agtgtcacag ccagtgctgc atccagctga gggagtacag ccccttccgc    660
tgcattcccc ggaccgggat cctggcccag tgcctgcccc tgtgatgtga gctcgaacct    720
gggcgcgagg gaccggcctg ggccctggga tgttcacgca ggaccgcgtt gcgcgggggc    780
tggttccagc ggaagcttcc cttacggttt gtgctgctgt ttctggggct ctgaaaatct    840
gtgggaactg aaaggctgtg accagcctgg tggcgcgaag tgtctgtgag aacaaatccc    900
aggcactggg gtgtagcctg attgttaaac atcmataaag gctcctggcc gactgaaaaa    960
aaaaaaaaaa aaaactcga                                                 979
```

<210> 713
<211> 680
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)..(7)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (15)..(16)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (22)..(22)
<223> n equals a,t,g, or c

<400> 713
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cactcantng aacannagct cnagctccac cgcgtggcg gccgctctag aactagtgga     60
tcccccgggc tgcaggaatt cggcacgaga tatttcgctg gaccctagaa aagccaccac    120
gacctgtggg ccatgatgct accccaatgg ctgctgctgc tgttccttct cttcttcttt    180
ctcttcctcc tcaccagggg ctcactttct ccaacaaaat acaacctttt ggagctcaag    204
gagtcttgca tccggaacca ggactgcgag actggctgct gccaacgtgc tccagacaat    300
tgcgagtcgc actgcgcgga gaaggggtcc gagggcagtc tgtgtcaaac gcaggtgttc    360
tttggccagt atagagcgtg tccctgcctg cggaacctga cttgtatata ttcaaagaat    420
gagaaatggc ttagcatcgc ctatggccg tgtcagaaaa ttggaaggca gaagttggct    480
aagaaaatgt tcttctagtg ctccctcctt cttgctgsct cctcctycty cacctgctct    540
cctccctacc cagagctctg tgktcaccct gttccccaga gcctccacca tgagtggagg    600
gaagtgggga gtgattgaaa taaagagctt tttcaatgaa aaaaaaaaaa aaaaaaaaaa    660
aaactcgagg ggggcccgg                                                 680
```

<210> 714
```

468

<211> 1188
<212> DNA
<213> Homo sapiens

<400> 714
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gctcgaactc tccactgtcc ccatttcctg caacagcatc tcagagggct tgaggtggct   60
atcaggcctt ccatcacagc ataaagctcc ttcaggagaa gaagagcgaa ggcacccagr   120
ctggggaaca gcagctccta ctatacctac cctgcccact ctggtccaac cgtgggcttg   180
gcctgacttt agactggaac cccttagtgc tcctgttcct ggtgtggagc agatccacct   240
accccagggg aaatgccaac tactttgcct tcagacctga tgctcctgtg gttgggcct   300
ccaagcctgc cctccccagt ggaagaagag ggccgtcttg tgaaaggcct caggctgacc   360
cttgcagcac cagcctctga ggtactgcca gactgggaag accctcccag ccacccaaca   420
gcgtgggccc agcccaggac acatcagccc gacactccaa attctatcaa gagtggcatt   480
tattctcctt gtggaggtgc ggtgctccgg ggagctggtg ctattgtgct taggaaggag   540
gtctgtccgt ccgtccgtct rtmcggccgg cctggcccca aatgggggcg aagaggggc   600
acggcccgag taaaaatccc ggcctattcc gggtgggaat atgtacaagg cggcggggca   660
caggcggggg tggggcggg cgggccggcg ccgcagccc ccacccgagg gccccgcac   720
ctcgggccct acttgtagaa tcagtacaaa ataggtgcta cctaaacgtt ccttctacct   780
gaattcgcta agtcggttat tgtgctgctt agttatgggg gcgggagggg gcccatggct   840
ttccacggcg gcggggtgta gggggaagca ggagaccctg acgggcccac agccctccag   900
ctttctcctt aggtaggtag acaggagtat ggggtggggt gaggtggggg cgcctgtgtg   960
tgcgtgtgca tgcggcacag gtgggcaggc cccagcttgg gagctgtgca ggcaccacac 1020
ctggttgtgt agggtgtttg gatgtgggca ctgctgtgca gagcggtggg tcatccttgt 1080
gggggcagcc acgcttgctg ctgggggtga ggctggccac accataggt acagctggca 1140
ccttcttctc cagccatgst yttgcccct gtggacwtgg cagatgtg   1188
```

<210> 715
<211> 1342
<212> DNA
<213> Homo sapiens

<400> 715
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ggcccgccca ggaggtattc tgcctttgac tgcaactctt gtcgtcttat gtgggtgttg   60
aattgatctg tctctgcagc cagatccagg ctcctggaag aaccatgtcc ggcagctact   120
ggtcatgcca ggcacacact gctgcccaag aggagctgct gtttgaatta tctgtgaatg   180
ttgggaagag gaatgccaga gctgccggct gaaaattacc caaccaagag aaatctgcag   240
gatggacttt ctggtcctct tcttgttcta cctggcttcg gtgctgagg gtcttgttct   300
tatctgcgtc tgctcgaaaa cccatagctt gaaaggcctg gccaggggag gagcacagat   360
attttcctgt ataattccag aatgtcttca gagagccrtg catggattgc ttcattacct   420
tttccatacg agaaaccaca ccttcattgt cctgcacctg gtcttgcaag ggatggttta   480
tactgagtac acctggggaa gtatttggct actgtcagga gctggagttg tccttgcatt   540
accttcttct gccctatctg ctgctaggt taaacctgtt ttttttcacc ctgacttgtg   600
gaaccaatcc tggcattata acaaaagcaa atgaattatt atttcttcat gtttatgaat   660
ttgatgaagt gatgtttcca aagaacgtga ggtgctctac tgtgattta aggaaaccag   720
ctcgatccaa gcactgcagt gtgtgtaact ggtgtgtgca ccgtttcgac catcactgtg   780
tttgggtgaa caactgcatc ggggcctgga acatcaggta cttcctcatc tacgtcttga   840
ccttgacggc ctcggctgcc accgtcgcca ttgtgagcac cacttttctg gtccacttgg   900
tggtgatgtc agatttatac caggagactt acatcgatga ccttggacac ctccatgtta   960
tggacacggt ctttcttatt cagtacctgt cctgactttt ccacggatt gtcttcatgc 1020
tgggctttgt cgtggttctg agcttcctcc tgggtggcta cctgttgttt gtcctgtatc 1080
tggcggccac caaccagact actaacgagt ggtacgagg tgactgggcc tggtgccagc 1140
gttgtcccct tgtggcctgg cctccgtcag cagagcccca agtccaccgg aacattcact 1200
cccatgggct tcggagcaac cttcaagaga tctttctacc tgcctttcca tgtcatgaga 1260
ggaagaaaca agaatgacaa gtgtatgact gcctttgagc tgtagttccc gtttatttac 1320
acatgtggat cctcgttttc ca   1342
```

<210> 716

<211> 1955
<212> DNA
<213> Homo sapiens

<400> 716
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ggcacgagtg ccatccctgt atttgctgcc atgctcttcc ttttctccat ggctacactg   60
ttgaggacca gcttcagtga ccctggagtg attcctcggg cgctaccaga tgaagcagct   120
ttcatagaaa tggagataga agctaccaat ggtgcggtgc cccagggcca gcgaccaccg   180
cctcgtatca agaatttcca gataaacaac cagattgtga aactgaaata ctgttacaca   240
tgcaagatct tccggcctcc ccgggcctcc cattgcagca tctgtgacaa ctgtgtggag   300
cgcttcgacc atcactgccc ctgggtgggg aattgtgttg gaaagaggaa ctaccgctac   360
ttctacctct tcatcctttc tctctccctc ctcacaatct atgtcttcgc cttcaacatc   420
gtctatgtgg ccctcaaatc tttgaaaatt ggcttcttgg agacattgaa aggaaactcc   480
tggaactgtt ctagaagtcc tcatttgctt ctttacactc tggtccgtcg tgggactgac   540
tggatttcat actttcctcg tggctctcaa ccagacaacc aatgaaagac atcaaaggat   600
catggacagg gaagaatcgc gtccagaatc cctacagcca tggcaatatt gtgaagaact   660
gctgtgaagt gctgtgtggc cccttgcccc ccagtgtgct ggatcgaagg ggtattttgc   720
cactggagga aagtggaagt cgacctccca gtactcaaga gaccagtagc agcctcttgc   780
cacagagccc agcccccaca gaacacctga actcaaatga gatgccggag gacagcagca   840
ctcccgaaga gatgccacct ccagagcccc cagagccacc acaggaggca gctgaagctg   900
agaagtagcc tatctatgga agagcttttt gtttgtgttt aattagggct atgagagatt   960
tcaggtgaga agttaaacct gagacagaga gcaagtaagc tgtccctttt aactgttttt 1020
ctttggtctt tagtcaccca gttgcacact ggcattttct tgctgcaagc tttttaaat   1080
ttctgaactc aaggcagtgg cagaagatgt cagtcacctc tgataactgg aaaagggt   1140
ctcttgggcc ctggcactgg ttctccatgg cctcagccac agggtccct tggaccccct   1200
ctcttccctc cagatcccag ccctcctgct tggggtcact ggtctcattc tggggctaaa 1260
agttttcgag actggctcaa atcctcccaa gctgctgcac gtgctgagtc cagaggcagt 1320
cacagagacc tctggccagg ggatcctaac tgggttcttg gggtcttcag gactgaagag 1380
gagggagagt ggggtcagaa gattctcctg gccaccaagt gccagcattg cccacaaatc 1440
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gtctcccatc cactctgaca ccttaagccc cactctttc ccattagatatatgtaagta   1560
gttgtagtag agataataat tgacatttct cgtagactac ccagaaactt ttttaatacc 1620
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gaggaagcct gagtgctcac ttaaacacta tcccctcaga ctccctgtgt gaggcctgca 1860
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<210> 717
<211> 1338
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (133)..(133)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (867)..(867)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1338)..(1338)

<400> 717
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gccagcgtgg cgngcctggc ggctcccggg tgdgagaga gcggtccggg aacgatgaag   180
gcctcgcagt gctgctgctg tctcagccac ctcttggctt ccgtcctcct cctgctgttg   240
ctgcctgaac taagcgggyc cctggmagtc ctgctgcagg cagccgaggc cgcgccaggt   300
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gcccagcagc cgggccgtgg tctggctgaa gctgcggggg ccgcggggct ccgagggagg   420
caatggcagc aaccctgtgg ccgggcttga dacggacgat cacggaggga aggccgggga   480
argctcggtg ggtggcggcc ttgctgtgag ccccaaccct ggcgacaagc ccatgaccca   540
gcgggccctg accgtgttga tggtggtgag cggcgcggtg ctggtgtact tcgtggtcag   600
gacggtcagg atgagaagaa gaaaccgaaa gactaggaga tatggagttt tggacactaa   660
catagaaaat atggaattga cacctttaga acaggatgat gaggatgatg acaacacgtt   720
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ttaatgctaa ttatttttgc tgatgtcata tgttaaagag ctataaattc caacaaccaa   1140
ctggtgtgta aaaataattt aaaatytcct ttactgaaag gtatttccca ttttgtggg   1200
gaaaagaagc caaatttatt actttgtgtt ggggtttta aaatattaag aaatgtctaa   1260
gttattgttt gcaaaacaat aaatatgatt ttaaattctc ttaaaaaaaa aaaaaaaac   1320
cccgggggggg ggcccggn   1338
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<210> 718
<211> 802
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (337)..(337)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (359)..(359)
<223> n equals a,t,g, or c

<400> 718
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ggattggcag aagcctgtac tcctcgtgaa gtcaacttgc tgaaagggat cataggtctc   180
atgagcagac tgtcaccgga tgagatccta ggcttgctga gcctccaagt actgcatgaa   240
gaaacaagtg gctgcaagga ggaagttaaa cccttctcag gcaccacccc atccaggaaa   300
ccactcccca agagggaaga acacgtggaa yttcctngaa atgcgsctac atggtgrtng   360
acctacctct tcgtatccta caacaaaggg gactggttca cttttttcctc ccaagtgtta   420
ctgccaytac tgtaacttgg aactggacat cagggatgat cctgctgtt ctttctagtg   480
agcctgctcc atctcagctt agccttcaca aggcctccat ctcccaggca ttctaacctc   540
tgaagaaagc tctctgtccc ctggactgcc tgtgtggagg gtaatgaact gggtccttta   600
aggaatggca cctgggtgcc cagaggcatg gccagaaggt gtctgtgggg gccatgcctt   660
aggggggatgc acccagggcg gctgagagag caactgcagg agtttccccct aaaatctctc   720
ctccagatcg ttctcgaact ttccccacta cttccataat aaaatgtata cttgttgaaa   780
aaaaaaaaaa aaaaaactcg ag   802
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<210> 719
<211> 1251
<212> DNA
<213> Homo sapiens

<400> 719
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agctcattgc tccactggag ggctacactc ggagtcgcca gatcgttttt atcctgctca     180
ggaccgtgtt tcttcgcctc gcctccctgg tggtcctgct cttctctctc tggaatcaga     240
tcacttgtgg gggcgactcc gaggctgagg actgcaaaac ctgtggctac aattacaaac     300
aacttccgtg ctgggagact gtcctgggcc aggaaatgta caaacttctg ctctttgatc     360
tgctgactgt cttggcagtc gcgctgctca tccagtttcc tagaaagctc ctctgtggcc     420
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tgctggggct catctacgcg cagacggtgg tctgggtggg gagttttttc tgccctttac     540
tgcccctgct taacacggtc aagttcctgc tgcttttcta cctgaagaag cttaccctct     600
tctccacctg ctccccggct gcccgcacct tccgggcctc cgcggcgaat ttctttttcc     660
ccttggtcct tctcctgggt ctggccatct ccagcgttcc cctgctttac agcatcttcc     720
tgatcccgcc ttctaagctt tgtggtccat tccggggggca gtcgtccatc tgggcccaga     780
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cgcagaataa agtcttcctg gcacggcgcg ctgtggcgct gacctccacc aaaccggctc    1020
tttgacccccc gcagcccacg tcccgctttc agaccccagg cccattgtaa gcctaggtca    1080
caacatctgt aaactaggag aactggagaa gactccacgc ccttccagct ttggtatctg    1140
gagatttcca gggcccctcg ccgccacgtc cctgactctc gggtgatctt ccttgtatca    1200
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<210> 720
<211> 517
<212> DNA
<213> Homo sapiens

<400> 720
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ggcgtacact gtggctctgg ctaactccta cggacgcctc atctctgagc tcaaacgtca     180
gagasagacg gaggcgcaga ataaagtctt cctggcacgg cgcgctgtgg cgctgacctc     240
caccaaaccg gctctttgac ccccgcagcc cacgtcccgc tttcagaccc caggcccatt     300
gtaagcctag gtcacaacat ctgtaaacta ggagaactgg agaagactcc acgcccttcc     360
agctttggta tctggagatt tccagggccc ctcgccgcca cgtccctgac tctcgggtga     420
tcttccttgt atcaataaat acagccgagg ttgctgaaaa aaaaaaaaa aaaaaaaaaa     480
aaaaaaaaa aaaaaaaaa aaaaaaaaa aactcga                                517


<210> 721
<211> 1441
<212> DNA
<213> Homo sapiens

<400> 721
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cggccgggtc ccgatgagcc tcctgttgcc tccgctggcg ctgctgctgc ttctcgcggc     120
gcttgtggcc ccagccacag ccgccactgc ctaccggccg gactggaacc gtctgagcgg     180
cctaacccgc gcccgggtag agacctgcgg gggatgacag ctgaaccgcc taaaggaggt     240
gagctttgaa ggaagaggtc cctagctctg ttccccctga gcctcttggg gagtgggcaa     300
catggtccca atgactgggg cggggagggg ggaaggatcc ctaggctgag agtcagcct     360


472

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aggctttcgt cacgcaggac attccattct agtatccttc tgttctgggg gaggggaaat    540
gggatgggca cctgggagæa tctccacgta acttcagaaa ggggtggcag atggttttca    600
actgacaagt tgaattgatt ggtagtggct cccagaggat tctgaggtgg tctccatgtt    660
gggtgggcaa gagagattga ctagtgatga ctgccacaga atggagagga gggccccttta   720
cttctttgaa ccctaatttt ctcacgtata agcggagacc ctggcccctcccgggcacag     780
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acacctccct ggggccgacc ctgagctcgt gctgctgggc cgccgctacg aggaactaga    960
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cgctagtgca ggagctcggc ttctaccgca aggcggcgcc cgacgcgcag gtgccccccg   1140
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tcagcatccc gggaatactt ctcttgctga gagccgatgc ccgtccccgg gccagcaggg   1320
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c                                                                   1441
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<210> 722
<211> 2674
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2607)..(2607)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2611)..(2611)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2621)..(2621)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2634)..(2634)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2650)..(2650)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2660)..(2660)
<223> n equals a,t,g, or c

<220>
<221> misc_feature

<222> (2669)..(2669)
<223> n equals a,t,g, or c

<400> 722
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cagaggaaaa gggtggactc ctatgtgacc tgttcttaga gcaagacaat caccatctga   180
attccagaag ccctgttcat ggttggggat attttctga ctgcatggaa tcagaaagaa   240
gcaaaaggat gggaaatgcc tgcattcccc tgaaaagaat tgcttatttc ctatgtctct   300
tatctgcgct tttgctgact gaggggaaga aaccagcgaa gccaaaatgc cctgccgtgt   360
gtacttgtac caaagataat gctttatgtg agaatgccag atccattcca cgcaccgttc   420
ctcctgatgt tatctcatta tcctttgtga gatctggttt tactgaaatc tcagaaggga   480
gttttttatt cacgccatcg ctgcagctct tgttattcac atcgaactcc tttgatgtga   540
tcagtgatga tgcttttatt ggtcttccac atctagagta tttattcata gaaaacaaca   600
acatcaagtc aatttcaaga catactttcc gggactaaa gkcattaatt cacttgagcc   660
ttgcaaacaa caatctccag acactcccaa aagatatttt caaaggcctg gattctttaa   720
caaatgtgga cctgaggggt aattcattta attgtgactg taaactgaaa tggctagtgg   780
aatggcttgg scacaccaat gcaactgttg aagacatcta ctgcgaaggc cccccagaat   840
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ttgcaaagtc tcaagacctg ccttatcaat cattgtccat agacactttt tcttatttga   960
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gcaagcctat agtcattgaa actcagctct atgttattgt ggcccagctg tttggtggct   1140
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cacacttgca aatgaatgcc tttcaaacat tgagactgct agaaccaagc actaccagta   2040
tctccatcct taactgtcca gtccagtgat gtgggaagtt acctttata agacaaaatt   2100
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ggggcccggt acccaattcg ccctatagtg agtcgtatta caattcactg gccgtcgttt   2340
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cccctttcgc cagctggcgt aatagcgaag aggccgcacc gatcgccctt cccaacagtt   2460
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taaattttgt taaatcagct catttttaa cccaataggc cgaaattcgg caaaaatccc   2580
ttattaatca aaagaaatag aaccganaat ngggttgaa ntgttgtttc caantttggg   2640
aaacaaaaan tcccacttan tttaaaagna aacg   2674

<210> 723
<211> 2207
<212> DNA
<213> Homo sapiens

<400> 723
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cagaagccct gttcatggtt ggggatattt tctcgactgc atggaatcag aaagaagcaa    180
aaggatggga aatgcctgca ttcccctgaa aagaattgct tatttcctat gtctcttatc    240
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tgtaccaaag ataatgcttt atgtgagaat gccagatcca ttccacgcac cgttcctcct    360
gatgttatct cattatcctt tgtgagatct ggtttactg aaatctcaga agggagtttt     420
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aagtctcaag acctgcctta tcaatcattg tccatagaca ctttttctta tttgaatgat    900
gagtatgtag tcatcgctca gcctttact ggaaaatgca ttttccttga atgggaccat     960
gtggaaaaga ccttccggaa ttatgacaa attacaggca catccactgt agtatgcaag    1020
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gttgctgaca gttcaaaagc tggttttact accatttaca aatggaacgg aaacggattc    1260
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tacaaacatg tcatagttga cttaagcgca tgagacacca aattctgtgg ctgccatcag    1860
aaattttcta cagtacatga cccggatgaa ctcaatgcat gatgactctt cttatcacac    1920
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atccttaact gtccagtcca gtgatgtggg aagttacctt ttataagaa aaatttaatt    2040
gtgtaactgt tctttgcagt gaagatgtgt aaataagcgt ttaatggtat ctgttactcc    2100
aaaaagaaat attaatatgt acttttccat ttatttattc atgtgtacag aaacaactgc    2160
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<210> 724
<211> 470
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (315)..(315)
<223> n equals a,t,g, or c

<400> 724
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gccagaggcc gcggaggggc gaagacccgg agtaactctc ccttcaccc caacccggat     120
cgccagccct cgagagctct gtgctccacg ccgaggatgc accgtctctg gattggtccg    180
gccttcttcc taatgacatc gctcagcgtc tctggagccg tcatcccgcg gaatggggc     240
ccaggggtg tcagytcggg gccttgcctc ttgcagctac tctgtggtca ggccgggtcc     300
tccaccatca ggaanatccc atcctgagct ctgtctcctg ccctcctgc tgtgggatgc    360
tgagcacaga gcccacagcc catctgcctc ttcacctccc tgaatccgtg tccatctgca    420
ataaacgaca gcctcggctg cctcgtgctg aaaaaaaaaa aaaaaaaaa             470
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475

<210> 725
<211> 1186
<212> DNA
<213> Homo sapiens

<400> 725
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gaattcggca cgagattgaa tgttccagat aatccctttc ccagtcctgc ctgacatctg      60
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tacctacctg gctgcaggat gaagctggcc agtggcttct tggttttgtg gctcagcctt     180
gggggtggcc tggctcagag cgacacgagc cctgacacgg aggagtccta ttcagactgg     240
ggccttcggc acctccgggg aagctttgaa tccgtcaata gctacttcga ttcttttctg     300
gagctgctgg gagggaagaa tggagtctgt cagtacaggt gccgatatgg aaaggcacca     360
atgcccagac ctggctacaa gccccaagag cccaatggct gcggctccta tttcctgggt     420
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ctggatgtct gttatgacac ttgcggtgcc aacaaatatc gctgtgatgc aaaattccga     540
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aggagaaagg gaacattttt ctacagctgg aaagtgagtc ctatcctttg aggaaatttg     900
aaaaaagaca tggagtggtt tgaaagctac tcttcattta agactgctct ccccaaccaa     960
gacacatttg cctggaaatt cagttcttag cttaaagact aaaatgcaag caaaccctgc    1002
aattcctgga cctgatagtt atattcatga gtgaaattgt ggggagtcca gccatttggg    1080
aggcaatgac tttctgctgg cccatgtttc agttgccagt aagcttctca catttaataa    1140
agtgtacttt ttagaacatt tggaaaaaaa aaaaaaaaa actcga                    1186
```

<210> 726
<211> 470
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (444)..(444)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (458)..(458)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (469)..(470)
<223> n equals a,t,g, or c

<400> 726
```
ctgcaggaat tcggcacgag cggcacgagt gccaatacaa ctgctgtcgc cctcaatgcg      60
ccagcccacc ctgcaaggct cctaccacct ggacccgcag tagccctcct actgctccgg     120
gggagctgca gtctctgttg ctgccaccaa ccgcataagg cgagctgcaa agccatgcca     180
tctgcaggct ccaatgtacc atagatgact cctcctcttc ctcctcctcc agcctggctt     240
ggagcagcta gatgggcaaa gctagaaaag cctaaaacgg gatgcaggga gtggtagcat     300
tagagcctca ccttgtcacg ctggccactg ggtggcaggg accagtttca gcaaaggcac     360
tcacacccac cctccaaagt ccagcctctm mttctggcaa aagctggcca gaactgggg     420
cccagggtga gtgggtgtgc tttnccaaaa accagggnag gttatagcnn               470
```

<210> 727
<211> 1821
<212> DNA
<213> Homo sapiens

<400> 727
ggaattcggc acgagcgtgg atccaagatg gcgacggcga tggattggtt gccgtggtct   60
ttactgcttt tctccctgat gtgtgaaaca agcgccttct atgtgcctgg ggtcgcgcct   120
atcaacttcc accagaacga tcccgtagaa atcaaggctg tgaagctcac cagctctcga   180
acccagctac cttatgaata ctattcactg cccttctgcc agcccagcaa gataacctac   240
aaggcagaga atctgggaga ggtgctgaga ggggaccgga ttgtcaacac cccttccag   300
gttctcatga acagcgagaa gaagtgtgaa gttctgtgca gccagtccaa caagccagtg   360
accctgacag tggagcagag ccgactcgtg gccgagcgga tcacagaaga ctactacgtc   420
cacctcattg ctgacaacct gcctgtggcc acccggctgg agctctactc caaccgagac   480
agcgatgaca agaagaagga aagtgatatc aaatgggcct ctcgctggga cacttactga   540
ccatgagtga cgtccagatc cactggtttt ctatcattaa ctccgttgtt gtggtcttct   600
tcctgtcagg tatcctgagc atgattatca ttcggaccct ccggaaggac attgccaact   660
acaacaagga ggatgacatt gaagacacca tggaggagtc tgggtggaag ttggtgcacg   720
gcgacgtctt caggcccccc ccagtacccc atgatcctca gctccctgct gggctcaggc   780
attcagctgt tctgtatgat cctcatcgtc atctttgtag ccatgcttgg gatgctgtcg   840
ccctccagcc ggggagctct catgaccaca gcctgcttcc tcttcatgtt catggggggtg   900
tttggcggat tttctgctgg ccgtctgtac cgcactttaa aaggccatcg gtggaagaaa   960
ggagccttct gtacggcaac tctgtaccct ggtgtggttt ttggcatctg cttcgtattg   1020
aattgcttca tttggggaaa gcactcatca ggagcggtgc cctttcccac catggtggct   1080
ctgctgtgca tgtggttcgg gatctccctg cccctcgtct acttgggcta ctacttcggc   1140
ttccgaaagc agccatatga caaccctgtg cgcaccaacc agattccccg gcagatcccc   1200
gagcagcggt ggtacatgaa ccgatttgtg ggcatcctca tggctgggat cttgccttcg   1260
gcgccatgtt catcgagctc ttcttcatct tcagtgctat ctgggagaat cagttctatt   1320
acctctttgg cttcctgttc cttgtttttca tcatcctggt ggtatcctgt tcacaaatca   1380
gcatcgtcat ggtgtacttc cagctgtgtg cagaggatta ccgctggtgg tggagaaatt   1440
tcctagtctc cggggggctct gcattctacg tcctggtttta tgccatcttt tatttcgtta   1500
acaagtgact gcagcgccaa gcggcatcca ccagcatcca agttggagaa aagggaaccc   1560
aagcagtaga gagcgatatt ggagtctttt gttcattcaa atcttggatt ttttttttc   1620
cctaagagat tctcttttta gggggaatgg gaaacggaca cctcataaag ggttcaaaga   1680
tcatcaattt ttctgacttt ttaaatcatt atcattatta tttttaatta aaaaaatgcc   1704
tgtatgcctt tttttggtcg gattgtaaat aaatatacca ttgtcctaca aaaaaaaaa   1800
aaaaaaactc gagggggggc c   1821

<210> 728
<211> 1094
<212> DNA
<213> Homo sapiens

<400> 728
ccacgcgtcc ggtgcacggc gacgtcttca ggcccccca gtaccccatg atcctcagct   60
ccctgctggg ctcaggcatt cagctgttct gtatgatcct catcgtcatc tttgtagcca   120
tgcttgggat gctgtcgccc tccagccggg gagctctcat gaccacagcc tgcttcctct   180
tcatgttcat ggggggtgttt ggcggatttt ctgctggccg tctgtaccgc actttaaaag   420
gccatcggtg gaagaaagga gccttctgta cggcaactct gtaccctggt gtggttttttg   300
gcatctgctt cgtattgaat tgcttcattt ggggaaagca ctcatcagga gcggtgccct   360
ttcccaccat ggtggctctg ctgtgcatgt ggttcgggat ctccctgccc ctcgtctact   420
tgggctacta cttcggcttc cgaaagcagc catatgacaa ccctgtgcgc accaaccaga   480
ttccccggca gatccccgag cagcggtggt acatgaaccg atttgtgggc atcctcatgg   540
ctgggatctt gcccttcggc gccatgttca tcgagctctt cttcatcttc agtgctatct   600
gggagaatca gttctattac ctctttggct tcctgttcct tgttttcatc atcctggtg   660
tatcctgttc acaaatcagc atcgtcatgg tgtacttcca gctgtgtgca gaggattacc   720
gctggtggtg gagaaatttc ctagtctccg ggggctctgc attctacgtc ctggtttatg   780

```
ccatctttta tttcgttaac aagctggaca tcgtggagtt catcccctct ctcctctact      840
ttggctacac ggccctcatg gtcttgtcct tctggctgct aacgggtacc atcggcttct      900
atgcagccta catgtttgtt cgcaagatct atgctgctgt gaagatagac tgattggagt      960
ggaccacggc caagcctgct ccgtcctcgg acaggaagcc accctgcgtg ggggactgca     1020
ggcacgcaaa ataaaataac tcctgctcgt ttggaatgta aaaaaaaaaa aaaaaaaaaa     1080
aaaaaaaaaa aaaa                                                        1094
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<210> 729
<211> 1042
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)..(11)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (15)..(15)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (941)..(941)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1016)..(1016)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1022)..(1022)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1028)..(1028)
<223> n equals a,t,g, or c

<400> 729
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ggttcgtcaa naaancttta agaggtaccc cccggaattt ttgggtcgac ccacgcgtcc       60
gctttcttct atttcttgtg gatattatgg ctaataacac arcaagttta gggagtccat      102
ggccagaaaa cttttgggag gaccttatca tgtccttcac tgtatccatg gcaatcgggc      180
tggtacttgg aggatttatt tgggctgtgt tcatttgtct gtctcgaaga agaagagcca      240
gtgctcccat ctcacagtgg agttcaagca ggagatctag gtcttcttac acccacggcc      300
tcaacagaac tggattttac cgccacagtg gctgtgaacg tcgaagcaac ctcagcctgg      360
ccagtctcac cttccagcga caagcttccc tggaacaagc aaattccttt ccaagaaaat      420
caagtttcag agcttctact ttccatccct ttctgcaatg tccaccactt cctgtggaaa      480
ctgagagtca gctggtgact ctcccttctt ccaatatctc tcccaccatc agcacttccc      540
acagtctgag ccgtcctgac tactggtcca gtaacagtct tcgagtgggc ctttcaacac      600
cgcccccacc tgcctatgag tccatcatca aggcattccc agattcctga gtagggtggc      660
ttttggtttt tgtttctttc ttgtcttgtc ttttattgaa aggaaatcaa aaataggcta      720
aacagaattt tgagggcatg gcccaaataa ctcatgagtt ccaagttgaa acatggttgt      780
gcaagttgga cattacaatg taaaacacat tttcttcaaa cacgttttcc cttttgtttc      840
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478

```
aaaaaatgta atattttccc ccaagcgttt tatatttatg tattttgtat tcaatgtgag    900
gcttattaaa aatagtgatt ctaatgtaag aatcagctaa ngatgcatta tattattttt    960
aattaaaatt aaaacttcag awatttgkgg gattacaatc ccawttacyt cccaangggg   1020
cnttaaangg ggggaaaaaa aa                                            1042
```

<210> 730
<211> 1556
<212> DNA
<213> Homo sapiens

<400> 730
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tttttttttt tttttttttt tttttgaata aaacttgaca taaatttatt tttatttcac     60
aatccacaaa acatttcaaa ttaaagaaat acattaaaag tctccagttt ttgctttaat    120
ttcacatttc atacactcac aatatttagg aaatagtcat tttgactgtc ttataactgg    180
gataagggtg cagcaacaat tctgccagat ggttaaatgc cccagaggat tttgctctt     240
ctcttcctaa tttgggagct ataaagcagt ttttactccc aacacaaatt cttgataaaa    300
accatactct ttgctgattt ttcatgttag acattaagga tgacatgcaa gtaaaaaaaa    360
aaaaaaaaaa aaaagtagcc ctgataccaa gttaatattc ccttgaaacc ttacttggct    420
gctaaatytc tttgttgaaa accaacttat aacaaattgg ttatccggtt agctttttc     480
cctttttctt ccatttctt cttgctccct ctttctctta cttttttctt ttggcatgtt    540
taattagaga acattttcta taagcattat taagaataat tgtccttaag gaatgatgga    600
taatataagg gaaatgaaaa taataaagaa aatgctacat ggaatcttt attcttgaac    660
catgttcaga cactattagc tgtgaccact gcaataggaa atgaaaaga gggtactttt    720
tcactgaaaa tcccactgtt caaagaaaca aagaaacggc cacataaact aaatattcac    780
aatactggaa atgraccaca gactttttga gtaatactcc agtgaactca tgtccttaaa    840
tgagaagggc agccacagac atctgcccac tggaactctc tggtggccac atttagggat    900
gcattcttcc ttacaagggc agccacctgt ggaagtggat tcttaaataa ctgtgtgcac    960
caaagaccat ctggcatggc ttaatcactg tacagactct gcagagaagt tggaattgag   1020
attcgtagag aagcaaacca ggaatgatgc ctgatgatta aggtcaatc caggaaggag   1080
aattcttcat gggcaacatc tatttcaata acaaactctc tccccagtga ctcatactta   1140
tttgtctgca aagttacaaa agaagatccc cagagaaagt gctttccaag ttgctagatg   1200
taagtttaag aaagaaaatt tttcccttaa gaaaaacgtg agcttggttt taaacttgag   1260
gcttgttttt aggtcaaatg aattggattt tttcctgttg cttttctaac aatgtaacga   1320
caacggtgaa gaaaaggtaa atcatcatgt tagtaaatcc aaggattttg cctccaggaa   1380
gtagataact attcttggga aaaacacata aagagtttgt ccagaaaaaa ttagtgtcaa   1440
aaatgaaaca tccaatgaca ccaaaagagt tcagtttct gtgcttgagt cccacacttc   1500
ttataatgat caaatcaagg aactttagaa tgtcctatgt tctgtcattt tgtgcc       1556
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<210> 731
<211> 615
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (18)..(18)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (20)..(20)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (584)..(584)
<223> n equals a,t,g, or c

<400> 731
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cctgtatata aaattggncn ctatggtccc gtacaatgaa gaaatgcaaa gatagttaag    60
aaagactcgg ccttcaagga gcctaaatgt gtagaaaagg actaaggcaa aacaataact   120
tttttgagct cttgccatgt gtgaagcact ttatacacct gtaaggtagg taacgttgtt   180
cttattaaac atgaagaaaa tgagactttg tgagaagcaa tacagtatag aagttaagaa   240
tatggactct aaagctagat ttcagaggtt tgaagtagct ctgctactta ctggctgtgt   300
gactttgagc agattactta acctgtctgt gcctatgttt acttttattg ttgtaaaaag   360
atatgcaaca taaaatattc catttcaacc gtttttacgt gtatacttca ctgacattag   420
ttgcattcac tatgttgtgc aaacgtaggg tcgctatgaa gattaaatga gttaattcat   480
ataaagccct cagaagagtg tctggcacat ggtgagtatt ggctgtactg tggtcgatgt   540
cattgttaga gagctttagt gatttgctta agacagaaag gtanactggg gtgcggtggg   600
ctcacgccct ggtta                                                    615
```

<210> 732
<211> 1125
<212> DNA
<213> Homo sapiens

<400> 732
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gtaccggtcc ggaattcccg ggtcgaccca cgcgtccgcc cacgcgtccg ctccccagta    60
gctgggatga ccggcactcg ccaccaagcc tagctaattt tttttgtatt ttgactagag   120
atggggtttc accatgttag tcaagctgct cttgttttgt tgttgttgtt gttgttgttg   180
ttgttgtttg atactgagtc tcgctcagc ctggcgacag agcgagactc catctcaaaa   240
aaaaaaaaca aaaaaccaa aaaaaaaaac agaaaagaaa caaaaaacgt tgttttaatt   300
ttaattaact caaatagctt catgtggcta gctgccgccc tgtagaacag cacagttcta   360
gaactttcga gaccttctcc ctgttatcca cacttacttt acagagtaga ctcagcatt   420
cgagtcccct gtccttcagg ccaggccaaa tcttggtccc cagagcccag tgtggcagag   480
gccatcgaaa actgacccac gcactctagc ccagccctgg atttacagcc aagcrctgta   540
tagggatggg tgactctttt gtttttgttt ttgttttgag ttgggtctct cgctctctca   600
cccaggctgg agtgcagtgg cataatcatg gctcgctgta gccttgacct cctgggctcg   660
ggccatcctc ctgcctcagc ctcctgcaga actggggctg cgggcacatg ccaccacacc   720
cagctatttt ttatttttatt tttttgtaga gtcagggtct cactgtgttg cccagactgg   780
tcttgaactc ctggcctcaa gctatcttcc tgcctcggcc tcccaaagtg tgggattac   840
aggtgtgagc cactgtgcct ggcctcttgg tgactctttg caagggcatt gctggctggc   900
tgatatggcc tgcagcctct gcctgtaacc atcagagcga tactctcatt atcggcaagg   960
tgggacccmc cctggcccaa gagacagggc ctgttattcc actgtatgga ggagaagctg  1020
aggcttargg aaggcagatg acttggcaag gtcataaaga cagcaagctg caggaccagc  1080
tcattctaag gcatgaaccc cctggggggcc caacttacca atgaa                 1125
```

<210> 733
<211> 2297
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (481)..(481)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1408)..(1408)
<223> n equals a,t,g, or c

<220>
<221> misc_feature

<222> (2248)..(2248)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (2277)..(2277)
<223> n equals a,t,g, or c

<400> 733
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tcagtttgcc ctgcatgtgt acctggcccc ctcctgggcg gatacggcag gcaaacggtg      60
caagggcggc tgccgggaga aggtgggcag ctggagtggg actgggggag acaggatcaa     120
tgtgacctgc ggtggtcccc aggtggccgg gatgcagtac ctgcacggcg tccygggccc     180
catcatcaac aaggtgtttg aggagaagta cgtggagctg accccagca aagtggawgt      240
taaggatgta gggtgaggcc gggggtaact ccggggggktg cggggygcag cggcagcggg     300
ttgggatcag gccctgtcag catgtgtgtt tgtgcttctg cccacccgtg tattgtcccc     360
tgtgtccgtg tcctggctgc tgtgagagcc actgttcctg tcgtggccct ggcgctgacc     420
gcgacctcct ctgccaaccc gccccgttcc acgcaggtgc tccgggctgc accgcccgca     480
naccgaggcc gaggtgctgg agcagagcgc gcagacgctg cgcgcccacc tggggggccct     540
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ccagctcttc cggcgcgtgc gcgagcgytt ccccggcgcc cagcacgaga atgtaccgtt     660
catcgccgtc accagcttcc tgtgcctgcg cttcttctct cccgccatca tgtcgcccaa     720
gctcttccac ctgcgggagc gccacgcgga cgcccgcacc agccgcaccc tgctcctgtt     780
ggccaaggca gtccagaacg tgggtaaaat ggacacgccg gcttccaggg ccaggaggc      840
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caccaagctc gtggacatcg aggagaagga cgagctggac ctgcagcgga cgctgagttt     960
gcaggcgcca cctgtgaagg aggggccact cttcatccac aggaccaagg gcaagggccc    1020
cctcatgtcc tcctccttca agaagctcta cttctccctc actaccgagg ccctcagctt    1080
cgcgaagacg cccagctcca agaaaagcgc cctcatcaag ttagccaaca tccgggcagc    1140
rgaaaaggtt gaggaaaaga gctttggcgg ctcgcacgtc atgcaggtca tctacacgga    1200
cgacgccggc aggccccaga ctgcctacct gcagtgcaag tgtgtgaag agcttaacca    1260
gtggctgtct gcgctgcgga aggtgagcat caacaacacc ggactgctgg gctcctacca    1320
ccctggcgtc ttccgtgggg acaagtggag ctgctgccac caaaagaga agacaggtca    1380
gggctgcgat aagacccggt cacggtgnac cctgcaggag tggaatgacc ctcttgacca    1440
tgaccttgag gcccagctca tctaccggca cctgctgggc gtggaggcca tgctgtggga    1500
gaggcaccgg gagctgagcg ggggcgcaga ggcaggcacg gtgcccacga gccctggcaa    1560
agtccccgag gactcattgg cccggctgct ccgggtgctg caggacctcc gcgaggccca    1620
tagctccagc ccggccggct ccccaccctc aragcccaac tgctcctgg agctgcagac    1680
gtgaggcccg ccctacgctc cccttgctga gtccctgcc aagcgctcgg agcccccca     1740
ggacactctg caccccctca ccccggtcct cctcattagg gtgcagggcc taggtctctt    1800
ccaggtgggg gagggggag agtcaggaat aagggatcc ccagaagtgc agagctgagc     1860
aggcttgggc ctgtcatggc tggccggaag tgtccccagc tccctacaga cgctgtagcc    1920
atcactgcct ctccagggac cctcctctcc tgcccaggac agacccagcc agaaccactg    1980
ctaggatggg ccgcacccag gggtctggcc tccagggacc tagagaatgg gagggagaac    2040
ggggccccag gagacccggc cgccaccca cccgctacc ttgggtgcca cagggctgtg     2100
ctgttgccaa cagtaaacct gctcttactg tcaaaaaaaa aaaaaaaaaa aaaaaaaaa     2160
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     2220
aaaaaaaaaa aaaaaaaaaa aaaaaaanaa aaaaaaaaaa aaaaaaaaaa aaaaaanaaa     2280
aaaaaaaaaa aaaaaaa                                                    2297
```

<210> 734
<211> 482
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (455)..(455)

<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (457)..(457)
<223> n equals a,t,g, or c

<400> 734
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ttacccagca acccaagtca tatcctgatg atatccatac tcctcagtca ygcatcccgt      60
ggtgcrgggg ctgaccccaa gaggagctgc tgcccccaga gggtggggag ccgaggcagg     120
gcctkggtca gacttaccag gctatgctcc cagcccagcc ctcactaggg accccgart     180
gcatctctct cctctccarg cctctgtttc tccatctgtg caaccacagt gttggacatg     240
gtartcccaa gtgtctgctc gtaactttgc cctctctgtg cccccaggtc agggctgcga     300
taagacccgg tcacggtgac cctgcaggag tggaatgacc ctcttgaccr tgaccttgag     360
gcccagctca tctaccggca cctgctggc gtggaggcca tgctgtggga raggcaccgg     420
gagctgagcg agggcgcaga ggcaggcacg tgctnangag ccctggcaaa gtccccgagg     480
at                                                                    482
```

<210> 735
<211> 1081
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)..(9)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (17)..(17)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (35)..(35)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1077)..(1077)
<223> n equals a,t,g, or c

<400> 735
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tgcacctcnc actattnggg ttacaaaagc tgganctcca ccgcggtggc ggccgctcta      60
gaactagtgg atcccccggg ctgcaggaat tcggcacgag tcgcccgctt gactagcgcc     120
ctggaacagc catttgggtc gtggagtgcg agcacggccg gccaatcgcc agtcagagg     180
gccaggaggg gcgcggccat tcgccgcccg gcccctgctc cgtggctggt tttctccgcg     240
ggcgcctcgg gcggaacctg gagataatgg gcagcacctg ggggagccct ggctgggtgc     300
ggctcgctct ttgcctgacg ggcttagtgc tctcgctcta cgcgctgcac gtgaaggcgg     360
cgcgcgcccg ggacgggat taccgcgcgc tctgcgacgt gggcaccgcc atcagctgtt     420
cgcgcgtctt ctcctccagg tggggcaggg gtttcgggct ggtggagcat gtgctgggac     480
aggacagcat cctcaatcaa tccaacagca tattcggttg catcttctac acactacagc     540
tattgttagg ttgcctgcgg acacgctggg cctctgtcct gatgcgctg agctccctgg     600
tgtctctcgc tggttctgtc tacctggcct ggatcctgtt cttcgtgctc tatgatttct     660
gcattgtttg tatcaccacc tatgctatca acgtgagcct gatgtggctc agtttccgga     720
aggtccaaga accccagggc aaggctaaga ggcactgagc cctcaaccca agccaggctg     780
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acctcatctg ctttgctttg gcatgtgagc cttgcctaag ggggcatatc tgggtcccta    840
gaaggcccta gatgtggggc ttctagatta cccctcctc ctgccatacc crcacatgac    900
aatggaccaa atgtgccaca cgctcgctct tttttacacc cagtgcctct gactctgtcc    960
ccatgggctg gtctccaaag ctctttccat tgcccaggga gggaaggttc tgagcaataa   1020
agtttcttag atcaatcaaa aaaaaaaaa agggsggccg tctaaagwtc ccccganggg   1080
g                                                                   1081


<210> 736
<211> 720
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)..(20)
<223> n equals a,t,g, or c

<400> 736
ccacgcgtcc gctccgcggn cgcctcgggc ggaacctgga gataatgggc agcacctggg     60
ggagccctgg ctgggtgcgg ctcgctcttt gcctgacggg cttagtgctc tcgctctacg    120
cgctgcacgt gaaggcggcg cgcgcccggg accgggattaccgcgcgctc tgcgacgtgg    180
gcaccgccat cagctgttcg cgcgtcttct cctccaggtt gcctgsggac acgctgggcc    240
tctgtmctga tgctgctgag ctccctggtg tctctcgctg gttctgtcta cctggsctgg    300
atcctgttct tcgtgctcta tgawtttctg cattgtttgt aatcaccacc tatgctatca    360
acgtgacctg atgtggctca gtttccggaa ggtccaagaa ccccagggca aggctaagag    420
gcactgagcc ctcaacccaa gccaggctga cctcatctgc tttgctttgg catgtgagcc    480
ttgcctaagg gggcatatct gggtccctag aaggccctag atgtgggggct tctagattac    540
cccctcctcc tgccataccc gcacatgaca atggaccaaa tgtgccacac gctcgctctt    600
ttttacaccc agtgcctctg actctgtccc catgggctgg tctccaaagc tctttccatt    660
gcccagggag ggaaggttct gagcaataaa gtttcttaga tcaaaaaaaa aaaaaaaaaa    720


<210> 737
<211> 1932
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (293)..(293)
<223> n equals a,t,g, or c

<400> 737
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gggagggcca tgatttccct cccggggccc ctggtgacca acttgctgcg gttttttgttc    180
ctggggctga gtgccctcgc gcccccctcg cgggcccagc tgcaactgca cttgcccgcc    240
aaccggttgc aggcggtgga gggaggggaa gtggtgcttc cagcgtggta cancttgcac    300
ggggaggtgt cttcatccca gccatgggag gtgccctttg tgatgtggtt cttcaaacag    360
aaagaaaagg aggatcaggt gttgtcctac atcaatgggg tcacaacaag caaacctgga    420
gtatccttgg tctactccat gccctcccgg aacctgtccc tgcggctgga gggtctccag    480
gagaaagact ctggccccta cagctgctcc gtgaatgtgc aagacaaaca aggcaaatct    540
agggccaca gcatcaaaac cttagaactc aatgtactgg ttcctccagc tcctccatcc    600
tgccgtctcc agggtgtgcc ccatgtgggg gcaaacgtga ccctgagctg ccagtctcca    660
aggagtaagc ccgctgtcca ataccagtgg gatcggcagc ttccatcctt ccagactttc    720
tttgcaccag cattagatgt catccgtggg tctttaagcc tcaccaacct ttcgttctcc    780
atggctggag tctatgtctg caaggcccac aatgaggtgg gcactgccaa tgtaatgtga    840
cgctggaagt gagcacaggg cctggagctg cagtggttgc tggagctgtt gtgggtaccc    900
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483

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tggttggact ggggttgctg gctgggctgg tcctcttgta ccaccgccgg ggcaaggccc     960
tggaggagcc agccaatgat atcaaggagg atgccattgc tccccggacc ctgccctggc    1020
ccaagagctc agacacaatc tccaagaatg ggaccctttc ctctgtcacc tccgcacgag    1080
ccctccggcc acccccatggc cctcccaggc ctggtgcatt gaccccacg cccagtctct    1140
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tatcccccat ccctggtggg gtttcttcct ctggcttgag ccgcatgggt gctgtgcctg    1260
tgatggtgcc tgcccagagt caagctggct ctctggtatg atgaccccac cactcattgg    1320
ctaaaggatt tggggtctct ccttcctata rgggtcacct ctagcacaga ggcctgagtc    1380
atgggaaaga gtcacactcc tgacccttag tactctgccc ccacctctct ttactgtggg    1440
aaaaccatct cagtaagacc taagtgtcca ggagacagaa ggagaagagg aagtggatct    1500
ggaattggga ggagcctcca cccacccctg actcctcctt atgaagccag ctgctgaaat    1560
tagctactca ccaagagtga ggggcagaga cttccagtca ctgagctcc caggcccccct    1620
tgatctgtac cccacccccta tctaacacca cccttggctc ccactccagc tccctgtatt    1680
gatataacct gtcaggctgg cttggttagg ttttactggg gcagaggata gggaatctct    1740
tattaaaact aacatgaaat atgtgttgtt ttcatttgca aatttaaata aagatacata    1800
atgtttgtat garaaaaaaa aaaaaaaaaa aaaaagggcg gccgctctag aggatccctc    1860
gaggggccca agcttacgcg tgcatgcgac gtcatagctc tctccctata gtgagtcgta    1920
ttataagcta gg                                                        1932


<210>  738
<211>  1595
<212>  DNA
<213>  Homo sapiens

<400>  738
gcctaaagag agctcccccca ggaccagccc tggccaaggg attgctgcag ccctcatcca      60
ccttccaagc actggaaaca aacattggag accaagtgag gcgtcactca acagccgtag     120
taatcaggga aatgacaagt tacatactga tatcctttgt tttgctgatt ggagttgggt     180
gcattgaaaa agatcagtcg tgcccagtgt ttggggggaag gaagcgtctt cacctgttgt     240
ttgtgggagg acagttgagg caggtssagc tgggagctcc ccgacctcca ggagggcaag     300
atccaagcca tcagcgactc ggacgrggtg aactacccct ggtacggcaa caccacagag     360
acctgcacca tcgtgggccc caccaagagg gactccaaᶜ tcatcatcag catgaatgac     420
aacttttacc ccagcgtcac atgggccgtg cccgtcagcg agagcaacgt ggccaagctc     480
accaacatct accgggacca gagcttcacc acctggctgg tggccaccaa cacctccacc     540
aacgacatga tcatcctgca gacgctgcac tggcgcatgc agctcagcat cgaggtgaac     600
cccaaccggc ccctgggcca gcgcgcccgg ctgcgggagc ccatcgccca ggaccagccc     660
aaaatcctga gcaagaatga gcccatcccg cccagcgccc tggtcaagcc caatgccaac     720
gatgcccagg tcctcatgtg gcggcccaag taygggcagc cgctggtggt gatcccgccc     780
aagcaccggt gacagccagg accacccgct agᶜtagact cacaaataat aataccgctg     840
aaaacaaaac tcagactcac tcttcagtca ttcagcaaga tacaaccatt ctaccctctc     900
cagcgggcgg atctcactgt gctgatgccc ccgggaaggc ctccccggct ctcggcacct     960
gcttcctttc agggagaggg gagatctaag caggacagac agaccccacg tgcgccctca    1020
gggtgacctc tggtctcctt gcctctcctt tttctcagtt tcagtcgctc acttgtaaca    1080
gattccctga aacactgctt tttccgtttt ttaaaaaaac tcctcttttg ggggctcagg    1140
ggcaggagga gggggagctg attaggaggg aagctccagc ccccgatcaa agagacagat    1200
ccacactgct gccgatttgt ggcgctggᶜc ggccttcccc ccaggtccct ccgccctctg    1260
tcatgcggcc ttatgtagac ttgctttgcc aaacttttgc cttaagctga attgaaagga    1320
agaaaaccaa tcggagaaag aaagcaggat ctcttttcta ccggactttt cctcttctgc    1380
cagaggtgga gggagggttg gggtcgcccg cgagartctc ttgarcccctt cttcccggtt    1440
gtcttgggag aagggtgagg atgggcattt agacccgaaa ccagctgctc actctttctt    1500
tttggcagaa ataaaaccac argtagaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1560
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                               1595


<210>  739
<211>  970
<212>  DNA
<213>  Homo sapiens
```

484

<220>
<221> misc_feature
<222> (854)..(854)
<223> n equals a,t,g, or c

<400> 739
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aartccctct tggtggggcc cacgatggtg caggtcctcc tgtggtgttg cccgtacag   120
ggtagttcac cccgtccgag tcgctgatgg cttggatctt gccctcctgg aggtcgggga   180
gctcccagct ggacatgccc tgctcgccgt actggttgta gaactccatg tggctgcacg   240
cctggatcca gccaactacc caagtctcct tcttggggat gggcggcatg accacctggg   300
ccgaggcccg gaagtggggt gtccggtagc ggagcaccac gctggaggac tcatcgatgc   360
tagtggggac ggggtcgatg gaggctttca catcaatcac cgtgatccct tcccggaaga   420
ctctggcttt gcctccgatg ctctgaatac agcccatggc atacaggagc gctctgatct   480
ccagggaagg ccagcagtca cagaaaaaac caggcattga aaggacagaggctgcaggac   540
ccagtacaga cggcgctgct ctccaatctc aactctcaag accgatatcc ataggataga   600
aaactcactg agtagactgg ggttgcatat atcactaccg cggcctgttt ataaataagg   660
attctgctgc atttcatgag ccctgggctc tctcttcttc tcctcgcagt ggacaaaaat   720
caccgatatt ctttgggtta aaaaaagttt gtagtttaat gaataattat gcggttctga   780
catccagccc ttctgtgcct cacacgcggg gacggcagct cgcagactct ccctgaagtc   840
ttcggaggaa gcangcgagc gccggcagac tcataaataa ggaaggctct gtccccgcgc   900
ggccgcgcca ccctcgcggc agaagcctga cttcctgccc tccggcttc cgcacgcgct   960
cccggcacga   970

<210> 740
<211> 711
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (345)..(345)
<223> n equals a,t,g, or c

<400> 740
ggcacgagcg aagaccctgt tcggaccctg ccccgattcc agactcaggt agatcgtcgg   60
cataccctct accgtggaca ccaggcagcc ctggggctga tggagagaga tcaggtatcc   120
cccagggagt aggggctacc ttgaggggat gatagacctc ccccactccc agtgkkactc   180
tggaaatatg aaggaactag ggagtggaag agatttcaga gtggggaga ggagttcctc   240
ccttcaaagc cagcaactgc ctttggggaa tgtcgggggg tctctccttt ctcctgcttg   300
tttraggtgg tacacagtcc ccccttcamc tggsgggaag ctgtnccgga caractcatc   360
tcagctttcc cttggggcag gatcggggggc agcagctcca gcagaaacag caggatctgg   420
agcaggaagg cctcgaggcc acacaggggc tgctggccgg cgagtgggcc ccaccctct   480
ggragctggg cagcctcttc caggccttcg tgaagaggga gagccaggct tatgcgtaag   540
cttcatagct tctgctggcc tggggtggac ccaggacccc tggggcctgg gtgccctgag   600
tggtggtaaa gtggagcaat cccttcacgc tccttggca tgttctgagc ggccagcttg   660
gcctttgcct taataaatgt gctttatttt caaaaaaaaa aaaaaaaaac t   711

<210> 741
<211> 973
<212> DNA
<213> Homo sapiens

<400> 741
ggcacgagcc cagcggaagc caagccacca ggcccccag cgtccacgcg gagcatgaac   60
attgaggatg gcgcgtgccc gcggctcccc gtgccccccg ctgccgcccg gtaggatgtc   120

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ctggccccac ggggcattgc tcttcctctg gctcttctcc ccacccctgg gggccggtgg    180
aggtggagtg gccgtgacgt ctgccgccgg aggggctcc ccgccggcca cctcctgccc     240
cgtggcctgc tcctgcagca accaggccag ccgggtgtc tgcacacgga gagacctggc     300
cgaggtccca gccagcatcc cggtcaacac gcggtacctg aacctgcaag agaacggcat    360
ccaggtgatc cggacggaca cgttcaagca cctgcggcac ctggagattc tgcagctgag    420
caagaacctg gtgcgcaaga tcgaggtggg cgccttcaac gggctgccca gcctcaacac    480
gctggagctt tttgacaacc ggctgaccac ggtgcccacg caggccttcg agtacctgtc    540
caagctgcgg gagctctggc tgcggaacaa ccccatcgag agcatcccct cctacgcctt    600
caaccgcgtg ccctcgctgc ggcgcctgga cctgggcgag ctcaagcggc tggaatacat    660
ctcggaggcg gccttcgagg ggctggtcaa ctgcgctac ctcaacctgg gcatgtgcaa     720
cctcaaggac atccccaacc tgacggccct ggtgcgcctg gaggagctgg agctgtcggg    780
caaccggctg gacctgatcc gcccgggctc cttccagggt ctcaccagcc tgcgcaagct    840
gtggctcatg cacgcccagg tagccaccat cgagcgcaac gccttcgacg acctcaagtc    900
gctggaggag ctcaacctgt cccacaacaa cctgatgtcg ctgccccacg acctcttcac    960
gcccctgcac cgc                                                      973

<210> 742
<211> 984
<212> DNA
<213> Homo sapiens

<400> 742
gaattcggca cgagcccagc ggaagccaag ccaccaggcc ccccagcgtc cacgcggagc     60
atgaacattg aggatggcgc gtgcccgcgg ctccccgtgc cccccgctgc cgcccggtag    120
gatgtcctgg ccccacgggg cattgctctt cctctggctc ttctccccac ccctgggggc    180
cggtggaggt ggagtggccg tgacgtctgc cgccggaggg ggctccccgc cggccacctc    240
ctgccccgtg gcctgctcct gcagcaacca ggccagccgg gtgatctgca cacggagaga    300
mctggccgag gtcccagcca gcatcccggt caacacgcgg tacctgaacc tgcaagagaa    360
cggcatccag gtgatccgga cggacacgtt caagcacctg cggcacctgg agattctgca    420
gctgagcaag aacctggtgc gcaagatcga ggtgggcgcc ttcaacgggc tgcccagcct    480
caacacgctg gagctttttg acaaccggct gaccacggtg cccacgcagg ccttcgagta    540
cctgtccaag ctgcgggagc tctggctgcg gaacaacccc atcgagagca tcccctccta    600
cgccttcaac cgcgtgccct cgctgcggcg cctggacctg ggcgagctca agcggctga     660
atacatctcg gaggcggcct tcgargggct ggtcaacctg cgctacctca acctgggcat    720
gtgcaacctc aaggacatcc ccaactgacg gccctggtgc gcctggagga gctggagctg    780
tcgggcaacc ggctggacct gatccgcccg ggctccttcc agggtctcac cagcctgcgc    840
aagctgtggc tcatgcacgc ccaggtagcc accatcgagc gcaacgcctt cgacgacctc    900
aagtcgctgg aggagctcaa cctgtcccac aacaacctga tgtcgctgcc ccacgacctc    960
ttcacgcccc tgcaccgcct cgta                                          984

<210> 743
<211> 553
<212> DNA
<213> Homo sapiens

<400> 743
gtgtgccgga tttggttagc tgagcccacc gagaggcgcc tgcaggatga aagctctctg     60
tctcctcctc ctccctgtcc tggggctgtt ggtgtctagc aagaccctgt gctccatgga    120
agaagccatc aatgagagga tccaggaggt cgccggctcc ctaatattta gggcaataag    180
cagcattggc ctggagtgcc agagcgtcac ctccaggggg gacctggcta cttgcccccg    240
aggcttcgcc gtcaccggct gcacttgtgg ctccgcctgt ggctcgtggg atgtgcgcgc    300
cgagaccaca tgtcactgcc agtgcgcggg catggactgg accggagcgc gctgctgtcg    360
tgtgcagccc tgaggtcgcg cgcagtggca acagcgcggg cggaggcggc ccaggtccg     420
gagggttgcg ggggagctgg aaataaacct ggagatgatg atgatgatga tgatggaaaa    480
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    540
aaaaaaaaaa aaa                                                      553
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486

<210> 744
<211> 1614
<212> DNA
<213> Homo sapiens

<400> 744
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tggttggggt cctctggggc attccagggt gagaggttgt cactgccacc tgggccatgt     120
gggccggcac cagcattttg tggttacgaa ttctacagtc acaaatatctttgggcaaat     180
ccccttctat acctcaaggc agcttttggt ttgcaacccc actggccaga gggaagggcc     240
agtcacttgg ctctctcact gccctgcgcc ccagatggtt ctaggggtgc tgttttccct     300
tggccctgcc aacaccactg tttttacttc tgctcattgg ctgagtgcag tggttcctgg     360
aagccagtgg cacgtttccc cgcgtagctc gcttatccca cagcacacac ccaagggttc     420
tgttgctaac acgctgaatt aattctttgc tcatcttaca gagtgtgttt tgactgcccc     480
catttctgag gccttgtaag gccagagctt tgttgcttca tcggcaggtt gggacttaga     540
tggccgtgaa tgtttcctct ctgctgctgc agtaagtaag tgccgcacc atagtgtgtt     600
tggaggctga agttgaagcg aggctgtgag gggagatgga cgtgtgagga gggatgatgg     660
ggcttgagca aagtggggga ggggcaaagc agttggccca acacattccc cacccctttg     720
agaggtctga ggcctgcaga cctggctcgg agcccacctg gtagtcctca gactgtgtgt     780
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtaaaagaga gaagttgtgg     840
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ggggctccca cggacccgcc gtgggcccag gggaggcaga gcctgagcca acagcagtgg    1140
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ggctttgtgt acctttgggt cctggggccc tggtgacttg gactccaggt tagagtcaag    1260
tgacaggaga aaggctggtg gggccctgtg cttccgactt catttcgagt gatggcagtt    1320
cccaggaagg aatccacagc tgacggtggc tgacagatca gagaatggaa ggcgaggcag    1380
gcgggcgtct gcgtgacctc aggtgcttgg ggccagcag acccagagaa ccatttccac    1440
taggccaggg tgccggaagt gtccacaggt cttagattcc ctgttcagat gaaaagattt    1500
gtgcctttaa tgataaaagt gatctgcata gagtcaaaaa ttcaagccat gggtataaaa    1560
tgcaagtaaa atccctgccc tcacctatcc caccctacta cacagagatg tcct          1614
```

<210> 745
<211> 1087
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)..(14)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (55)..(55)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (63)..(64)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (174)..(174)

<400> 745
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ttnnaaagcg agggcttgta aaggggaaga tgggaccgtt gtgaaggaag gatgattgg    120
gctttgaagc aaaagtgggg gaagggggca aaggcagttg gcccaacaca ttcnccaccc   180
ctttgagagg tctgaggcct gcagacctgg ctcggagccc acctggtagt cctcagactg   240
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgtgtgtaaa agagagaagt   300
tgtggagaaa tggggggctg attctgctca gattcatcag gatgagtaga aggcacccag   360
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cttcccatct ggaccctgct gggcagggct tctragctcc ttagcactag caggaggggc   480
tccaggggcc ctccctccat ggcagccagg acaggactct aaaatgagga cagagagct    540
cgtggggggc tcccacggac ccgccktggg cccaggggag gcagagcctg agccaacagc   600
agtggtgctg tggaccgtgg atcctgaggg tggcctgggg caagtaccgg ctgagggtcc   660
aggtgggctt tgtgtacctt tgggtcctgg ggccctggtg acttggactc caggttagag   720
tcaagtgaca ggagaaaggc tggtggggcc ctgtgcttcc gacttcattt cgagtgatgg   780
cagttcccag gaaggaatcc acagctgacg gtggctgaca gatcagagaa tggaaggcga   840
ggcaggcggg cgtctgcgtg acctcaggtg cttggggccc agcagaccca gagaaccatt   900
tccactaggc cagggtgccg gaagtgtcca caggtcttag attccctgt cagatgaaaa    960
gatttgtgcc tttaatgata aaagtgatct gcatagagtc aaaaattcaa gccatgggta   1020
taaaatgtca agtaaaatcc ctgccctcac ctatcccacc ctactacaca gagatgtcct   1080
ctcgagg                                                             1087
```

<210> 746
<211> 1201
<212> DNA
<213> Homo sapiens

<400> 746
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gaattccgga acaaawgcyg gagctccacc gcggtggcgg ccgctctaga actagtggat    60
cccctnkgct gcaggaattc ggcacgagct gctgtctgtg cttcgggatc ctgccctcca   120
gaagtcctcc aaggcttggt acttgctgcg tgtccaggtc ctgcagctgg tggcagctta   180
ccttagcctc ccgtcaaaca acctctcaca ctccctgtgg gagcagctct gtgcccaagg   240
ctggcagaca cctgagatag ctctcataga ctcccataag ctcctccgaa gcatcatcct   300
cctgctgatg ggcagtgaca ttctctcaac tcagaaagca gctgtggaga catcgttttt   360
ggactatggt gaaaatctgg tacaaaaatg cgaggttctt tcagaggtgc tgagctgctc   420
agagaagctg gtctgccacc tgggccgcct gggtagtgtg agtgaagcca aggccttttg   480
cttggaggcc ctaaaactta caacaaagct gcagatacca cgccagtktg ccctgttcct   540
ggtgctgaag ggcgagctgg agctggcccg caatgacatt gatctctgtc agtcggacct   600
gcagcaggtt ctgttcttgc ttgagtcttg cacagagttt ggtggggtga ctcagcacct   660
ggactctgtg aagaaggtcc acctgcagaa ggggaagcag caggcccagg tcccctgtcc   720
tccacagctc ccagaggagg agctcttcct aagaggccct gctctagagc tggtgccact   780
```

```
gtggccaagg agcctggccc catagcacct tctacaaact cctccccagt cttgaaaacc    840
aagccccagc ccatacccaa cttcctgtcc cattcaccca cctgtgactg ctcgctctgc    900
gccagccctg tcctcacagc agtctgtctg cgctgggtat tggtcacggc aggggtgagg    960
ctggccatgg gccaccaagc ccagggtctg gatctgctgc aggtcgtgct gaagggtgt   1020
cctgaagccg ctgagcgcct cacccaagct ctccaagctt ccctgaatca taaaacaccc   1080
ccctccttgg ttccaagcct cttggatgag atttggctaa gcatacacac tgttgcactg   1140
gagggcctga accagccatc aaacgagagc ctgcagaagg tncncagtaa ggctgaagtt   1200
t                                                                  1201


<210> 747
<211> 628
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (567)..(567)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (596)..(596)
<223> n equals a,t,g, or c

<400> 747
ttgggaagct ggtmcscctg caggtaccgg tccggaattc ccgggtcgac ccacgcgtyc     60
gttccagatt caattgaaag tgcattgcag ggtgatgaaa gatgtgtgct tgatactatg    120
cgtttggttg accttctctt ggtgctatta tttgaaggac gaaagctttt gccaaagtct    180
agtgctggat ctacaggcag aatcccagga ctccggagat tagatagttc tggggagcgc    240
tcacatcggc agcttataga ttgtattcga agtaaagata ccgatgcact tatagatgca    300
attgacacag gaggtcagaa aatatttttt taaatataaa aagaaagttg tgagataacc    360
atataggcag tttctagttt tcggacagta ctcttagaaa tccagaaac aaagtggcac    420
cccttcgata ttctccccta tccctgtgca taattatgta attatcagct tggttcttgg    480
tgaaacctga ataaatgctt tttgatgcaa aaaaaaaaa aaaagaaaaa taaaaaaaaa    540
agataaaaaa aaaccttaaa aaaaaanaaa aaaaaaaaaa aaaaaaaaaa gaaaanaaaa    600
aaaaaaaaca aaaaaaaaaa aaaaaaaa                                      628


<210> 748
<211> 425
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (367)..(367)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (380)..(380)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (408)..(408)
<223> n equals a,t,g, or c
```

<400> 748

```
atcgtgctca agtacatcat ggctggttgc cccttgtttc tgggtaatct ctgggatgtg    60
actgaccgcg acattgaccg ctacacggaa gctctgctgc aaggctggct tggaagcagg   120
cccagggccc cccttctcta ctatgtaaac caggcmcgcc aagctccccg actcaagtat   180
cttattgggg ctgcacctat acctatggct tgcctgtctc tctgcggtaa ccccatggag   240
ctgtcttatt gatgctagaa gcctcataac tgttctacct ccaaggttag atttaatcct   300
taggataact cttttaaagt gattttcccc adgttttat atgaaacatt tcctttgat    360
ttaaccncag ataataaagn tacatccatt taaaaaaaaa aaaaaaancc cgaggggggg   420
cccgg                                                              425
```

<210> 749
<211> 1016
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 749

```
ncggacgcgt gggaggcaca ggcctgagaa gtctgcggct gagctgggag caaatccccc    60
accccctacc tgggggacag ggcaagtgag acctggtgag ggtggctcag caggaaggaa   120
ggagaggtgt ctgtgcgtcc tgcacccaca tdttctctg tcccctcctt gccctgtctg   180
gaggctgcta gactcctatc ttctgaattc tatagtgcct gggtctcagc gcagtgccga   240
tggtggcccg tccttgtggt tcctctctac ttggggaaat caggtgcagc ggccatggct   300
acagcaagac cccctggat gtgggtgctc tgtgctctga tcacagcctt gcttctgggg   360
gtcacagagc atgttctcgc caacaatgat gtttcctgtg accacccctc taacaccgtg   420
ccctctggga gcaaccagga cctgggagct ggggccgggg aagacgcccg gtcggatgac   480
agcagcagcc gcatcatcaa tggatccgac tgcgatatgc acacccagcc gtggcaggcc   540
gcgctgttgc taaggcccaa ccagcttac tgcggggcgg tgttggtgca tccacagtgg   600
ctgctcacgg ccgcccacct gcaggaagaa agttttcaga gtcgtctcgg ccactactcc   660
ctgtcacagt ttattgaatc tgggccggag atgtccaggg ggtcaattca atcccgcaca   720
gggtagttca agctgacatc taaggacgtg agttcgttca acggagaacg aagaatgbc    780
acaacacagg tgagcataag ggtaccgcga tggtcgcatg gagggaccac gtgttgggtt   840
gtagggcaca caaacgacca aggcatcctg gagcacagga tatcgcgaga atcaaagccg   900
aaggtccaaa cactagtaca gttgaggaac gggatgtgaa atagtacgag gcaaataaca   960
cccgggggttc cacatgaaat agcttttct cgcctcttcc ctcccccttc ctctgg      1016
```

<210> 750
<211> 1490
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<400> 750

```
ngccaggaag gcacaggcct gagaagtctg cggctgagct gggagcaaat cccccacec    60
ctgtctggag gctgctagac tcctatcttc tgaattctat agtgcctggg tctcagcgca   120
gtgccgatgg tggcccgtcc ttgtggttcc tctctacctg gggaaataag gtgcagcggc   180
catggctaca gcaagacccc cctggatgtg ggtgctctgt gctctgatca cagccttgct   240
tctgggggtc acagagcatg ttctcgccaa caatgatgtt tcctgtgacc accctctaa    300
caccgtgccc tctggagca accaggacct gggagctggg gccggggaag acgcccggtc   360
ggatgacagc agcagccgca tcatcaatgg atccgactgc gatatgcaca cccagccgtg   420
```

```
gcaggccgcg ctgttgctaa ggcccaacca gctctactgc ggggcggtgt tgtgcatcc      480
acagtggctg ctcacggccg cccactgcag gaagaaagtt ttcagagtcc gtctcggcca      540
ctactccctg tcaccagttt atgaatctgg gcagcagatg ttccaggggg tcaaatccat      600
cccccaccct ggctactccc accctggcca ctctaacgac ctcatgctca tcaaactgaa      660
cagaagaatt cgtcccacta aagatgtcag acccatcaac gtctcctctc attgtccctc      720
tgctgggaca aagtgcttgg tgtctggctg ggggacaacc aagagccccc aagtgcactt      780
ccctaaggtc ctccagtgct tgaatatcag cgtgctaagt cagaaaaggt gcgaggatgc      840
ttacccgaga cagatagatg acaccatgtt ctgcgccggt gacaaagag gtagagactc       900
ctgccagggt gattctgggg ggcctgtggt ctgcaatggc tccctgcagg gactcgtgtc      960
ctgggggagat taccccttgtg cccggcccaa cagaccgggt gtctacacga acctctgcaa    1020
gttcaccaag tggatccagg aaaccatcca ggccaactcc tgagtcatcc caggactcag     1080
cacaccggca tccccacctg ctgcagggac agccctgaca ctcctttcag accctcattc     1140
cttcccagag atgttgagaa tgttcatctc tccagcccct gaccccatgt ctcctggact     1200
cagggtctgc ttcccccaca ttgggctgac cgtgtctctc tagttgaacc ctgggaacaa     1260
tttccaaaac tgtccagggc gggggttgcg tctcaatctc ctggggcac tttcatcctc     1320
aagctcaggg cccatccctt ctctgcagct ctgacccaaa tttagtccca gaaataaact     1380
gagaagtgga aacaaacaca acccccgatc atataaacgc agcacacttc acccaccggc     1440
actacccgcc acgccagcca cccccaccac aaacggccgc tccttacccg              1490
```

<210> 751
<211> 1441
<212> DNA
<213> Homo sapiens

<400> 751
```
aggaaggaag gagaggtgtc tgtgcgtcct gcacccacat ctttctctgt cccctccttg       60
ccctgtctgg aggctgctag actcctatct tctgaattct atagtgcctg ggtctcagcg      120
cagtgccgat ggtggcccgt ccttgtggtt cctctctactt ggggaaatc aggtgcagcg      180
gccatggcta cagcaagacc cccctggatg tgggtgctct gtgctctgat cacagccttg      240
cttctggggg tcacagagca tgttctcgcc aacaatgatg tttcctgtga ccacccctct      300
aacaccgtgc cctctgggag caaccggacc tgggagctgg gccggggaa gacgcccggt       360
cggatgacag cagcagccgc atcatcaatg gatccgactg cgatatgcac acccagccgt      420
ggcaggccgc gctgttgcta aggcccaacc agctctactg cggggcggtg ttggtgcatc      480
cacagtggct gctcacggcc gcccactgca ggaagaaagt tttcagagtc cgtctcggcc      540
actactccct gtcaccagtt tatgaatctg ggcagcagat gttccagggg gtcaaatcca      600
tccccaccc tggctactcc caccctggcc actctaacga cctcatgctc atcaaactga       660
acagaagaat tcgtcccact aaagatgtca gacccatcaa cgtctcctct cattgtccct      720
ctgctgggac aaagtgcttg gtgtctggct ggggggacaac caagagcccc caagtgcact      780
tccctaaggt cctccagtgc ttgaatatca gcgtgctaag tcagaaaagg tgcgaggatg      840
cttacccgag acagatagat gacaccatgt tctgcgccgg tgacaaagca ggtagagact      900
cctgccaggg tgattctggg gggcctgtgg tctgcaatgg ctccctgcag ggactcgtgt      960
cctgggggaga ttacccttgt gcccggccca acagaccggg tgtctacacg aacctctgca    1020
agttcaccaa gtggatccag gaaaccatcc aggccaactc ctgagtcatc ccaggactca     1080
gcacaccggc atccccacct gctgcaggga cagccctgac actcctttca gaccctcatt     1140
ccttcccaga gatgttgaga atgttcatct ctccagcccc tgaccccatg tctcctggac     1200
tcagggtctg cttcccccac attgggctga ccgtgtctct ctagttgaac cctgggaaca     1260
atttccaaaa ctgtccaggg cgggggttgc gtctcaatct ccctggggca ctttcatcct     1320
caagctcagg gcccatccct tctctgcagc tctgacccaa atttagtccc agaaataaac     1380
tgagaagtgg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1440
a                                                                      1441
```

<210> 752
<211> 1516
<212> DNA
<213> Homo sapiens

<220>

491

<221> misc_feature
<222> (34)..(34)
<223> n equals a,t,g, or c

<400> 752

```
ttcacgtgca cactgatcac aacgtcacgc ctgncaggqc accggtccgg gaattcccgg        60
gtcgacccac gcgtccgcag gagaggtgtc tgtgcgtcct gcacccacat ctttctctgt       120
cccctccttg ccctgtctgg aggctgctag actcctatct tctgaattct atagtgcctg       180
ggtctcagcg cagtgccgat ggtggcccgt ccttgtggtt cctctctact tggggaaatc       240
aggtgcagcg gccatggcta cagcaagacc cccctggatg tgggtgctct gtgctctgat       300
cacagccttg cttctggggg tcacagagca tgttctcgcc aacaatgatg tttcctgtga       360
ccacccctct aacaccgtgc cctctgggag caaccaggac ctgggagctg gggcggggga       420
agacgcccgg tcggatgaca gcagcagccg catcatcaat ggatccgact gcgatatgca       480
cacccagccg tggcaggccg cgctgttgct aaggcccaac cagctctact gcggggcggt       540
gttggtgcat ccacagtggc tgctcacggc cgcccactgc aggaagaaag ttttcagagt       600
ccgtctcggc cactactccc tgtcaccagt ttatgaatct gggcagcaga tgttccaggg       660
ggtcaaatcc atcccccacc ctggctactc ccaccctggc cactctaacg acctcatgct       720
catcaaactg aacagaagaa ttcgtcccac taaagatgtc agacccatca cgtctcctc        780
tcattgtccc tctgctggga caaagtgctt ggtgtctggc tgggggaaa ccaagagccc        840
ccaagtgcac ttccctaagg tcctccagtg cttgaatatc agcgtgctaa gtcagaaaag       900
gtgcgaggat gcttacccga gacagataga tgacaccatg ttctgcgccg gtgacaaagc       960
aggtagagac tcctgccagg gtgattctgg ggggcctgtg gtctgcaatg gctccctgca      1020
gggactcgtg tcctggggag attacccttg tgcccggccc aacagaccgg gtgtctacac      1080
gaacctctgc aagttcacca gtggatcca ggaaaccatc caggccaact cctgagtcat       1140
cccaggactc agcacaccgg catccccacc tgctgcaggg acagccctga cactcctttc      1200
agaccctcat tccttcccag agatgttgag aatgttcatc tcccagccc ctgaccccat       1260
gtctcctgga ctcagggtct gcttccccca cattgggctg accgtgtctc tctagttgaa      1320
ccctgggaac aatttccaaa actgtccagg gcgggggttg cgtctcaatc tccctggggc      1380
actttcatcc tcaagctcag ggcccatccc ttctctgcag ctctgaccca aatttagtcc      1440
cagaaataaa ctgagaagtg gaatcttaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      1500
aaaaaagggc ggccgc                                                      1516
```

<210> 753
<211> 1381
<212> DNA
<213> Homo sapiens

<400> 753

```
gataactcag gcccggtgcc cagagcccag gaggaggcag ggccaggaa ggcacaggcc         60
tgagaagtct gcggctgagc tgggagcaaa tcccccaccc cctacctggg ggacagggtg       120
cagcggccat ggctacagca agacccccct ggatgtgggt gctctgtgct ctgatcacag       180
ccttgcttct gggggtcaca gagcatgttc tcgcaacaa tgatgtttcc tgtgaccacc        240
cctctaacac cgtgccctct gggagcaacc aggacctggg agctggggcg ggggaagacg       300
cccggtcgga tgacagcagc agccgcatca tcaatggatc cgactgcgat atgcacaccc       360
agccgtggca ggccgcgctg ttgctaaggc ccaaccagct ctactgcggg gcggtgttgg       420
tgcatccaca gtggctgctc acggccgccc actgcaggaa gaaagttttc agagtccgtc       480
tcggccacta ctccctgtca ccagtttatg aatctgggca gcagatgttc caggggtca        540
aatccatccc ccaccctggc tactcccacc ctggccactc taacgacctc atgctcatca       600
aactgaacag aagaattcgt cccactaaag atgtcagacc catcaacgtc tcctctcatt       660
gtccctctgc tgggacaaag tgcttggtgt ctggctgggg gacaaccaag agcccccaag       720
tgcacttccc taaggtcctc cagtgcttga atatcagcgt gctaagtcag aaaaggtgcg       780
aggatgctta cccgagacag atagatgaca ccatgttctg cgccggtgac aaagcaggta       840
gagactcctg ccagggtgat tctgggggc ctgtggtctg caatggctcc ctgcagggac        900
tcgtgtcctg gggagattac ccttgtgccc ggcccaacag accgggtgtc tacacgaacc       960
tctgcaagtt caccaagtgg atccaggaaa ccatccaggc caactcctga gtcatcccag      1020
gactcagcac accggcatcc ccacctgctg caggacagc cctgacactc ctttcagacc       1080
ctcattcctt cccagagatg ttgagaatgt tcatctctcc agcccctgac cccatgtctc      1140
```

492

```
ctggactcag ggtctgcttc ccccacattg ggctgaccgt gtctctctag ttgaaccctg    1200
ggaacaattt ccaaaactgt ccagggcggg ggttgcgtct caatctccct ggggcacttt    1260
catcctcaag ctcagggccc atcccttctc tgcagctctg acccaaattt agtcccagaa    1320
ataaactgag aagtggaatc ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa     1380
a                                                                    1381

<210> 754
<211> 1439
<212> DNA
<213> Homo sapiens

<400> 754
cccacgcgtc cgcaggagag gtgtctgtgc gtcctgcacc cacatctttc tctgtccct     60
ccttgccctg tctggaggct gctagactcc tatcttctga attctatagt gcctgggtct     120
cagcgcagtg ccgatggtgg cccgtccttg tggttcctct ctacttgggg aaatcaggtg     180
cagcggccat ggctacagca agaccccct ggatgtgggt gctctgtgct ctgatcacag     240
ccttgcttct gggggtcaca gagcatgttc tcgccaacaa tgatgtttcc tgtgaccacc     300
cctctaacac cgtgccctct gggagcaacc aggacctggg agctggggcc gggggaagac     360
gcccggtcgg atgacagcag cagccgcatc atcaatggat ccgactgcga tatgcacc      420
cagccgtggc aggccgcgct gttgctaagg cccaaccagc tctactgcgg ggcggtgttg     480
gtgcatccac agtggctgct cacggccgcc cactgcagga agaaagtttt cagagtccgt     540
ctcggccact actccctgtc accagtttat gaatctgggc agcagatgtt ccagggggtc     600
aaatccatcc cccaccctgg ctactcccac cctggccact ctaacgacct catgctcatc     660
aaactgaaca gaagaattcg tcccactaaa gatgtcagac ccatcaacgt ctcctctcat     720
tgtccctctg ctgggacaaa tgcttggtgt ctggctgggg acaaccaag acccccaagt     780
gcacttccct aaggtcctcc agtgcttgaa tatcacgtgc taagtcagaaaaggtgcgag     840
gatgcttacc cgagacagat agatgacacc atgttctgcg ccggtgacaa agcaggtaga     900
gactcctgcc agggtgattc tgggggggcct gtggtctgca atggctccct gcagggactc     960
gtgtcctggg gagattaccc ttgtgcccgg cccaacagac cgggtgtcta cacgaacctc     1020
tgcaagttca ccaagtggat ccaggaaacc atccaggcca actcctgagt catcccagga     1080
ctcagcacac cggcatcccc acctgctgca gggacagccc tgacactcct ttcagaccct     1140
cattccttcc cagagatgtt gagaatgttc atctctccag ccctgaccc catgtctcct     1200
ggactcaggg tctgcttccc ccacattggg ctgaccgtgt ctcttagtt gaaccctggg     1260
aacaatttcc aaaactgtcc agggcggggg ttgcgtctca atctccctgg ggcactttca     1320
tcctcaagct cagggcccat cccttctctg cagctctgac ccaaatttag tcccagaaat     1380
aaactgagaa gtggaatctt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa      1439

<210> 755
<211> 1191
<212> DNA
<213> Homo sapiens

<400> 755
gctgggctgg aacacaagar cccacagggc tgccgtccac actctcccgg tcagagtcct     60
gggaccacat ggggacgctg ccatggcttc ttgccttctt cattctgggt ctccaggctt     120
gggatactcc caccatcgtc tcccgcaagg agtgggggc aagccgctc gcctgcaggg     180
ccctgctgac cctgcctgtg gcctacatca tcacagacca gctcccaggg atgcagtgcc     240
agcagcagag cgtttgcagc cagatgtgac ggggggttgca gtcccattcc gtctacacca     300
taggctggtg cgacgtggcg tacaacttcc tggttgggga tgatggcagg gtgtatgaag     360
gtgttggctg gaacatccaa ggcttgcaca cccagggcta caacaacatt tccctgggca     420
tcgccttctt tggcaataag ataagcagca gtccccagcc ctgctgcctt atcagctgcag     480
agggtctgat ctcctatgcc atccagaagg gtcacctgtc gcccaggtat attcagccac     540
ttcttctgaa agaagagacc tgcctggacc ctcaacatc agtgatgccc agraaggttt     600
gccccaacat catcaaacga tctgcttggg aagccagaga gacacactgc cctaaaatga     660
acctcccagc caaatatgtc atcatcatcc acaccgctgg cacaagctgc actgtatcca     720
cagactgcca gactgtcgtc cgaaacatac agtcctttca catggacaca cggaactttt     780
gtgacattgg atatcaataa ggccaggcgt ggcggcgatt acgtctgtaa tcccaggact     840
```

493

```
ttgggaggcc aaggcgggca gatcacttca ggccaggaat tcaagagcag cctggccaat    900
atggcgaaac tctgtctcta ctgaaaacaa acaaacaaac aaacaaacaa acaaagaaac    960
aacaaaaatt agccgggtgt ggtggcacac gctgtagtc ccagctactc aggaggctga   1020
ggcataagaa ttgcttgaac cctggaggcg gaggttgcag tgagctgaga ttgggccacc   1080
gcactccagt ctgggagaca gagtgagact gtctcaaaac aacaacaaaa aaatccctaa   1140
cataatctca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggcggccg c            1191
```

<210> 756
<211> 1626
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (525)..(525)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (542)..(542)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (562)..(562)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (607)..(607)
<223> n equals a,t,g, or c

<400> 756
```
ccacgcgtcc gacgcggcgc acgcggcagt cctgatggcc cggcatgggt taccgctgct     60
gcccctgctg tcgctcctgg tcggcgcgtg gctcaagcta ggaaatggac ggctactag    120
catggtccaa ctgcagggtg ggagattcct gatgggaaca aattctccag acagcagaga    180
tggtgaaggg cctgtgcggg aggcgacagt gaaacccttt gccatcgaca tatttcctgt    240
caccaacaaa gatttcaggg attttgtcag ggagaaaaag tatcggacag aagctgagat    300
gtttggatgg agctttgtct ttgaggactt tgtctctgat gagctgagaa acaaagccac    360
ccagccaatg aagtctgtac tctggtggct tccagtggaa aaggcatttt ggaggcagcc    420
tgcaggtcct ggctctggca tccgagagag actggagcac ccagtgttac acgtgagctg    480
gratgacgcc cgtgcctaat gtgcytkgsg ggggraaacg actgnccac sggagggaag    540
antggggagt ttttccgccc gnagggggc ttgaarggtc caagtttacc ccatggggg    600
aactggnttc cagccaaacc gcaccaacct gtggcaggga aagttcccca agggagacaa    660
agctgaggat ggcttccatg gagtctcccc agtgaatgct ttccccgccc agaacaacta    720
cgggctctat gacctcctgg ggaacgtgtg ggagtggaca gcatcaccgt accaggctgc    780
tgagcaggac atgcgcgtcc tccggggggc atcctggatc gacacagctg atggctctgc    840
caatcaccgg gcccgggtca ccaccaggat gggcaacact ccagattcag cctcagacaa    900
cctcggtttc cgctgtgctg cagacgcagg ccggccgcagggagctgt aagcagccgg    960
gtggtgacaa ggagaaaagc cttctagggt cactgtcatt ccctggccat gttgcaaaca   1020
gcgcaattcc aagctcgaga gcttcagcct caggaaagaa cttccccttc cctgtctccc   1080
atccctctgt ggcaggcgcc tctcaccagg gcaggagagg actcagcctc ctgtgttttg   1140
gagaaggggc ccaatgtgtg ttgacgatgg ctgggggcca ggtgtttctg ttagaggcca   1200
agtattattg acacaggatt gcaaacacac aaacaattgg aacagagcac tctgaaaggc   1260
cattttttaa gcattttaaa atctattctc tcccccttc tccctggatg attcaggaag   1320
ctgmacattg tttcctcaag gcagaatttt cctgctctg ttttctcagc cagttgctgt   1380
ggaaggagaa tgctttcttt gtggcctcat ctgtggtttc gtgtccctct gaaggaaact   1440
```

494

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agtttccact gtgtaacagg cagacatgta actatttaaa gcacagttca gtcctaaaag  1500
ggtctgggag aaccagatga tgtactaggt gaagcattgc attgtgggaa tcacaaagca  1560
aatagtactc cagaaagacc ctgtctcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  1620
aaaaaa                                                             1626


<210> 757
<211> 549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (496)..(496)
<223> n equals a,t,g, or c

<400> 757
gggacgcgtc gttgcagcag cggctcccag ctcccagcca ggattccgcg cgccccttca   60
cgcgccctgc tcctgaactt cagctcctgc acagtcctcc ccaccgcaag gctcaaggcg  120
ccgccggcgt ggaccgcgca cggcctctag gtctcctcgc caggacagca acctctcccc  180
tggccctcat gggcaccgtc agctccaggc ggtcctggtg gccgctgcca ctgctgctgc  240
tgctgctgct gctcctgggt cccgcgggcg cccgtgcgca ggaggacgag gacggcgact  300
acgaggagct ggtgctagcc ttgcgttccg aggaggacgg cctggccgaa gcacccgagc  360
acggaaccac agccaccttc caccgctgcg ccaaggatcc gtggaggttg cctggcacct  420
acgtggtggt gctgaaggag gagacccacc tctcgcagtc agagcgcact gcccgccgcc  480
tgcaggccca ggctgnccgc cggggatacc taccaagatc ctgcatgtct ccatggcct   540
tcttcctgg                                                          549


<210> 758
<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)..(6)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (13)..(13)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (17)..(17)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1020)..(1020)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1084)..(1084)
<223> n equals a,t,g, or c
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<400> 758
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cttaancggg ggnccanggg gaaaactcgt gacmytatag aaggtagcc tgcaggtacc     60
ggtccggaat tcccgggtcg acccacgcgt ccggagccag gcagtgagac tggctcgggc    120
gggccgggac gcgtcgttgc agcagcggct cccagctccc agccaggatt ccgcgcgccc    180
cttcacgcgc cctgctcctg aacttcagct cctgcacagt cctccccacc gcaaggctca    240
aggcgccgcc ggcgtggacc gcgcacggcc tctaggtctc ctcgccagga cagcaacctc    300
tcccctggcc ctcatgggca ccgtcagctc caggcggtcc tggtggccgc tgccactgct    360
gctgctgctg ctgctgctcc tgggtcccgc gggcgcccgt gcgcaggagg acgaggacgg    420
cgactacgag gagctggtgc tagccttgcg ttccgaggag gcggcctgg ccgaagcacc    480
cgagcacgga accacagcca ccttccaccg ctgcgccaag gatccgtgga ggttgcctgg    540
cacctacgtg gtggtgctga aggaggagac ccacctctcg cagtcagagc gcactgcccg    600
ccgcctgcag gcccaggctg cccgccgggg atacctcacc aagatcctgc atgtcttcca    660
tggccttctt cctggcttcc tggtgaagat gagtggcgac ctgctggagc tggccttgaa    720
gttgccccat gtcgactaca tcgaggagga ctcctctgtc tttgcccaga gcatcccgtg    780
gaacctggag cggattaccc ctccacggta ccgggcggat gaataccagc ccccgacgg    840
aggcagcctg gtggaggtgt atctcctaga caccagata cagagtgacc accgggaaat    900
cgagggcagg gtcatggtca ccgacttcga gaatgtgccc gaggaggacg ggacccgctt    960
ccacagacag gccagcaagt gtgacagtca tggacccacc tggcaggggt ggtcagcggn   1020
cgggatgccg gcgtggccaa gggtgccagc atgcgcagcc tgcgcgtgct ttcccaaaaa   1080
aaanccccctt ttggggggcc cccccaaaa aaaggggggg                         1120
```

<210> 759
<211> 1893
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (5)..(5)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1853)..(1853)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1871)..(1871)
<223> n equals a,t,g, or c

<400> 759
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ngggnttttt tttttttttt ttttttttag gacaacgttt gtttgttttt attttaaaa     60
gtcaccatat taataaaaat gctacaaaac ccagaataaa tatcttcaag ttacaaaagc    120
aaaacaggtc tagaaaagtt ggctgtaaaa aggcaacaga gaggacagac ccaaaagata    180
aatgtctgct tgcttgggtg gggctggtgc tcaaggaggg acagttgttg gccctctccc    240
ccgaccatgc cttagaagca tdccgccag gccagtgaat caggcctggg tgataacgga    300
aaaagttcca tgcctgcagg catcgttctg ccatcactca ccgagcttcc tggtctgtgt    360
tccccttccc agcctcactg ttacccgtaa aaatgaggag cccagccggg tgaagtaaga    420
agaggcttgg cttcagagcc agcccaatct gcgtttctgg ctcagttcct gctgtgag     480
cttggcaggc acgcccctc tggttccagg tttcttcctc tgtgaagtag gggtgcgaak    540
wgtgtactgc cgggtagtgg agcgggttgg ctgagacagt gcatgcacca ctgcacactg    600
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496

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ccgagtcagt cctaggtgat ggctccccgc aggccacctt tgggtgttgc tagcacagcc      660
tggcatagag cagagtaaag gtggctcagg aaaccaagca cagcctgtga ccaccagggg      720
crcacctgtc tccagctctg gctagatgcc atccagaaag ctaagcctcc attaatcagg      780
gagcccccag gggcttctcc acagttagct ggagatgagg gccatcagca cctttcacac      840
tmaccccca acgatgtttg tccctgcagc ccctaccgcc ccctcccta tccatgggaa      900
gaatcctgcc tccttggtgg agacctgagg attgaatgcc tggcacggaa caagagctca      960
ataaaagtca ttctgcccac ggacatcggc acattgggag cagctggcag cacccgagca     1020
cagctcgacc tgtttgaatg gtgaaatgcc ccacagtgag ggagggagct tcctggcacc     1080
tccacctggg gaggaggcac ccagagtgag tgagttccag gcaaggaggc tgccccactc     1140
aagggccagg ccagcagccc cggaaaggcg gaagcatccc catccctcg tgccaggcca     1200
tggagggctg agagagggac aagtcggaac cattttaaag ctcagcccca gcccttgacc     1260
ctccccagac acccatcctg ggatgggggct gtcactggag ctctgggag gcctgcgcca     1320
ggtgccggct ccggcagcag atggcaacgg ctgtcacggc ctcttcgctg gtgctgcctg     1380
tagtgctgac gtcccggctc ctgactacac acgtgttgtc tacggcgtag ccccccagga     1440
cgtgggaggt cccagggagg gcactgcagc cagtcagggt ccagccctcc tcgcaggcca     1500
cggtcacctg ctcctgaggg gccgggattc catgctcctt gactttgcat tccagacctg     1560
gggcatggca gcaggaagcg tggatgctgg cctccctgtg gcccacgcac tggttgggct     1620
gacctcgtgg cctcagcaca ggcggcttgt gggtrccaar rtcctccacc tcccagtggg     1680
agctgcagcc tgtgaggacg tggccctgtt ggtggcagtg gacacgggtc cccatgctgg     1740
cctcagctgg tggagctgtg tggacgctgc agttggcctg gggtagcaga cagcacctgg     1800
caatggcgta gacaccctca ccccccaaaag cgttgtgggc ccgggagccc aanttsaaag     1860
aagattcccc nttcccccccc stccccgtg tgc                                  1893
```

<210> 760
<211> 1187
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (39)..(39)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (46)..(46)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1052)..(1052)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1108)..(1108)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1129)..(1129)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1138)..(1138)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1158)..(1158)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (1172)..(1172)
<223> n equals a,t,g, or c

<400> 760
gcacccacct ggcaggggtg gtcagcggcc gggatgttng gcgtgntcaa gggtgccagc   60
atgcgcagcc tgcgcgtgct caactgccaa gggaagggca cggttagcgg caccctcata   120
ggcctggagt ttattcggaa aagccagctg gtccagcctg tggggccact ggtggtgctg   180
ctgcccctgg cgggtgggta cagccgcgtc ctcaacgccg cctgccagcg cctggcgagg   240
gctggggtcg tgctggtcac cgctgccggc aℊttccggg acgatgcctg cctctactcc   300
ccagcctcag ctcccgaggt catcacagtt ggggccacca tgcccagga ccagccggtg   360
accctggggga ctttggggac caactttggc cgctgtgtgg acctctttgc cccagggggag   420
gacatcattg gtgcctccag cgactgcagc acctgctttg tgtcacagag tgggacatca   480
caggctgctg cccacgtggc tggcattgca gccatgatgc tgtctgccga gccggagctc   540
accctggccg agttgaggca gagactgatc cacttctctg ccaaagatgt catcaatgag   600
gcctggttcc ctgaggacca gcgggtactg acccccaacc tggtggccgc cctgccccc   660
agcacccatg gggcaggttg gcagctℊtt tgcaggactg tgtggtcagc acactcgggg   720
cctacacgga tggccacagc catcgcccgc tgcgccccag atgaggagct gctgagctgc   780
tccagtttct ccaggagtgg gaagcggcgg ggcgagcgca tggagccca agggggcaag   840
ctggtctgcc gggcccacaa cgcttttgggg ggtgagggtg tctacgccat tgccaggℊc   900
tgcctgctac cccaggccaa ctgcagccgty cacacagctt caccagctga ggccagcatg   960
gggacccgtg tccactgcac caacagggcc acgtcctcac aggctgcagc ttccactggg   1020
aggtggaaga accttggcac ccacaagccc gncttgtgct gaagccacca aggtcaagcc   1080
caaccaagtg ccgtgggcca ℊaagggangg ccaagcattc cacgctttnc ttgcttgnca   1140
ttgcccccaa gtcttggnaa tggcaaaagt cnaaggaagc attggga   1187

<210> 761
<211> 2351
<212> DNA
<213> Homo sapiens

<400> 761
ccacgcgtcc ggcagaagca gcagcagcag aagacacagc gccggtccag gaggcgℊtc   60
gagctgttcg taaagtcgcc cgacagcttt ttctccgtag tatgcgagtt gacaaaacag   120
ccagagaaca gggctcccca ttacaatctt ttcgagatct tttcccttgc taaccggatc   180
tgatttgtgc gaaaacatgc cttgcacttg tacctggagg aactggagac agtggattcg   240
acctttagta gcggtcatct acctggtgtc aatagtggtt gcggttcccc tatgcgtgtg   300
ggaattacag aaactggagg ttggaataca caccaaggct tggtttattg ctggaatctt   360
tttgctgtga ctattcctat atcactgtgg gtgatattgc aacacttagt gcattataca   420
caacctgaac tacaaaaacc aataataagg attctttggg atggtaccta ttacagtttt   480
tagatagttg gatagctttg aaatatcccg gaattgcaat atatgtggat acctgcagag   540
aatgctatga agcttatgta atttacaact ttatgggatt ccttaccaat tatctaacta   600
accggtatcc aaatctggta ttaatccttg aagccaaaga tcaacagaaa catttccctc   660
ctttatgttg ctgtℊcacca tgggctatgg gagaagtatt gctgtttagg tgcaaactaa   720
gtgtattaca gtacacagtt gtcagacctt tcaccaccat cgttgcttta atctgtgagc   780
tgcttggtat atatgacgaa gggaacttta gcttttcaaa tgcttggact tatttggtta   840
taataaacaa catgtcacag ttgtttgcca tgtattgtct cctgcℋtttt tataaagtac   900
taaaagaaga actgagccca atccaacctg ttggcaaatt tctttgtgta aagctggtgg   960
tttttgtttc ttttttgattt ggcgtttacc ttttcctaac atataggcaa gcagtagtta   1020
ttgctttgtt ggtaaaagtt ggcgttattt ctgaaaagca tacgtgggaa tggcaaactg   1080

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tagaagctgt ggccaccgga ctccaggatt ttattatctg tattgagatg ttcctcgctg      1140
ccattgctca tcattacaca ttctcatata aaccatatgt ccaagaagca gaagagggct      1200
catgctttga ttcctttctt gccatgtggg atgtctcaga tattagagat gatatttctg      1260
aacaagtaag gcatgttgga cggacagtca ggggacatcccaggaaaaaa ttgtttcccg      1320
aggatcaaga tcaaaatgaa catacaagtt tattatcatc atcatcacaa gatgcaattt      1380
ccattgcttc ttctatgcca ccttcaccca tgggtcacta ccaagggttt ggacacactg      1440
tgactcccca gactacacct accacagcta agatatctga tgaaatcctt agtgatacta      1500
taggagagaa aaaagaacct tcagataaat ccgtggattc ctgaacagta tggaaaagca      1560
aactgtgcaa ctactacatt atatcattac ctggtatccc atggattttg tgcttgggac      1620
agaccataaa tgatggaaaa tgtcaacaca aaaatagctg aaagccaggt acaactactg      1680
catttatata tgtaagtttt gtatatcaaa aatadtggt ctaaatttcc tagacttaga      1740
cttgatttct taacattagg gtatcgcata ctcaaatggt agacaatgac cccaactaaa      1800
tcttcctgat gttacactgc tttatcaaga ggatggactt tttttttttt gagacagaca      1860
gagtcttgct ctgtcaccca ggctggagtg cagtggcgca atctcgggtc actgcaagct      1920
ctgcctccca agttcatgcc attctcctgc ctcagccctc ccaagtagct gggactacag      1980
gcacctgcca ccatgcccag ctaatttttt tttttcagt agagacaggg tctcaccatg      2040
ttagccagga tggtcttgat ctgacctcgt gatccgccga cctcggcctc ccaaagtgct      2100
ggaattacag gcgtgagcca ctgcgcctgg ccaagaatgg acatttttta aaaaaacatc      2160
agtacttcct accactgctg catgagtata atgctccgga attatcagaa agcataatgc      2220
agaaatacga attagtggaa cttaatcatg tgccatataa gcttacctaa caaacagtta      2280
tatccctatt cctcaactga atgtctttca ataaataaga atttatcatt taaaaaaaaa      2340
aaaaaaaaaa a                                                          2351

<210> 762
<211> 1001
<212> DNA
<213> Homo sapiens

<400> 762
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aggtatagga agaatgcgta tcttttcatc tattacttaa tccagttctg tggccactct       120
tggatattta caaatatgac agtcagattc ttttcatttg gaaaggtaa aactccgaaa       180
cagttttttt attttttaact tttaatcctt gttttcacct catcctgctt atattaaatt       240
tctacacacc tcaaccttct accacgggat acagattcaa tggttgacac tttttatgct       300
attggacttg tgatgcgact ttgccaatcc gtatctctcc tggaactgct gcacatatat       360
gttggcattg agtcaaacca tcttctccca aggtttttgc agctcacaga aagaataatc       420
atcctttttg tggtgatcac cagtcaagag gaagtccaag agaaatatgt ggtgtgtgtt       480
ttattcgtct tttggaatct attggatatg gttaggtaca cttatagcat gttatcagtc       540
ataggaatat cctatgctgt cttgacatgg ctcagtcaaa cactatggat gccaatttat       600
cctttgtgtg ttcttgctga agcatttgcc atctatcaat cgctgcctta ttttgaatca       660
tttggcactt attccaccaa gctgcccttt gacttatcca tctatttccc atadtgctg       720
aaaatatatc tcatgatgct ctttataggt atgtatttta cctacagtca tctatactca       780
kaaagaagag acatcctcgg aatctttccc attaaaaaaa agaagatgtg aagtacagca       840
ttccagtgtg acacgagaaa agacaggctg tggattcagt gcagtaaata aaacacagga       900
agtattctgg tggaaaaaaa aaaaaaaaaa aaaaaaaar aaraaaaaaa aawaaaaaaa       960
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a                          1001

<210> 763
<211> 669
<212> DNA
<213> Homo sapiens

<400> 763
ccacgcgtcc ggacactttt tatgctattg gacttgtgat gcgactttgc caadcgtat         60
ctctcctgga actgctgcac atatatgttg gcattgagtc aaaccatctt ctcccaaggt       120
ttttgcagct cacagaaaga ataatcatcc tttttgtggt gatcaccagt caagaggaag       180
tccaagagaa atatgtggtg tgtgttttat tcgccttttg gaatctattg gatatggtta       240
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499

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ggtacactta tagcatgtta tcagtcatag gaatatccta tgctgtcttg acatgggctc    300
agtcaaacac tatggatgcc aatttatcct ttgtgtgttc ttgctgaagc atttgccatc    360
tatcaatcgc tggcttattt tgaatcattt ggcacttatt ccaccaagct gccctttgac    420
ttatccatct atttcccata tgtgctgaaa atatatctca tgatgctct tataggtatg    480
tattttacct acagtcatct atactcagaa agaagagaca tcctcggaat ctttcccatt    540
aaaaaaaaga agatgtgaag tacagcattc cagtgtgaca cgagaaaaga caggctgtgg    600
attcagtgca gtaaataaaa cacaggaagt attctggtgg aaaaaaaaaa aaaaaaaaaa    660
aaaaaaaaa                                                           669
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<210> 764
<211> 1356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1231)..(1231)
<223> n equals a,t,g, or c

<400> 764
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cccacgcgtc cgaaagaatg ttgtggctgc tcttttttct ggtactgcc attcatgctg     60
aactctgtca accaggtgca gaaaatgctt ttaaagtgag acttagtatc agaacagctc    120
tgggagataa agcatatgcc tgggatacca atgaagaata cctcttcaaa gcgatggtag    180
ctttctccat gagaaaagtt cccaacagag aagcaacaga aatttcccat gtcctacttt    240
gcaatgtaac ccagaggtat cattctggtt tgtggttaca gacccttcaa aaaatcacac    300
ccttcctgct gttgaggtgc aatcagccat aagaatgaac aagaaccgga tcaacaatgc    360
cttctttcta aatgaccaaa ctctggaatt tttaaaaatc ccttccacac ttgcaccacc    420
catggaccca tctgtgccca tctggattat tatatttgt gtgatatttt gcatcatcat    480
agttgcaatt gcactactga tttttatcagg gatctggcaa cgtagaagaa agaacaaaga    540
accatctgaa gtggatgacg ctgaagataa gtgtgaaaac atgatcacaa ttgaaaatgg    600
catcccctct gatcccctgg acatgaaggg agggcatatt aatgatgcct tcatgacaga    660
ggatgagagg ctcacccctc tctgaagggc tgttgttctg cttcctcaag aaattaaaca    720
tttgtttctg tgtgactgct gagcatcctg aaataccaag agcagatcat atattttgtt    780
tcaccattct tcttttgtaa taaattttga atgtgcttga aagtgaaaag caatcaatta    840
tacccaccaa caccactgaa atcataagct attcacgact caaaatattc taaaatattt    900
ttctgacagt atagtgtata aatgtggtca tgtggtattt gtagttattg atttaagcat    960
ttttagaaat aagatcaggc atatgtatat attttcacac ttcaaagacc taaggaaaaa   1020
taaattttcc agtggaggat acatataata tggtgtagaa atcattgaaa atggatcctt   1080
tttgacgatc acttatatca ctctgtatat gactaagtaa acaaaagtga gaagtaatta   1140
ttgtaaatgg atggataaaa ttggaattac tcatatacag ggtgggattt tatcctgtta   1200
tcacaccaac agttgattat atattttctg natatcagcc cctaatagga caattctatt   1260
tgttgaccat ttctacaatt tgtaaagtc caatctgtgc taacttaata aagtaataat   1320
catccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa                             1356
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<210> 765
<211> 1063
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (444)..(444)
<223> n equals a,t,g, or c

<220>
<221> misc_feature
<222> (962)..(962)